DRIVER LICENSE DIVISION OGDEN

615 EAST 5300 SOUTH, SOUTH OGDEN, UTAH

DFCM PROJECT #: 10052550

PERMIT DOCUMENTS
NOVEMBER 08, 2010

State of Utah–Department of Administrative Services

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT

4110 State Office Building/Salt Lake City, Utah 84114/801-538-3018

DFCM PLAN CHECK

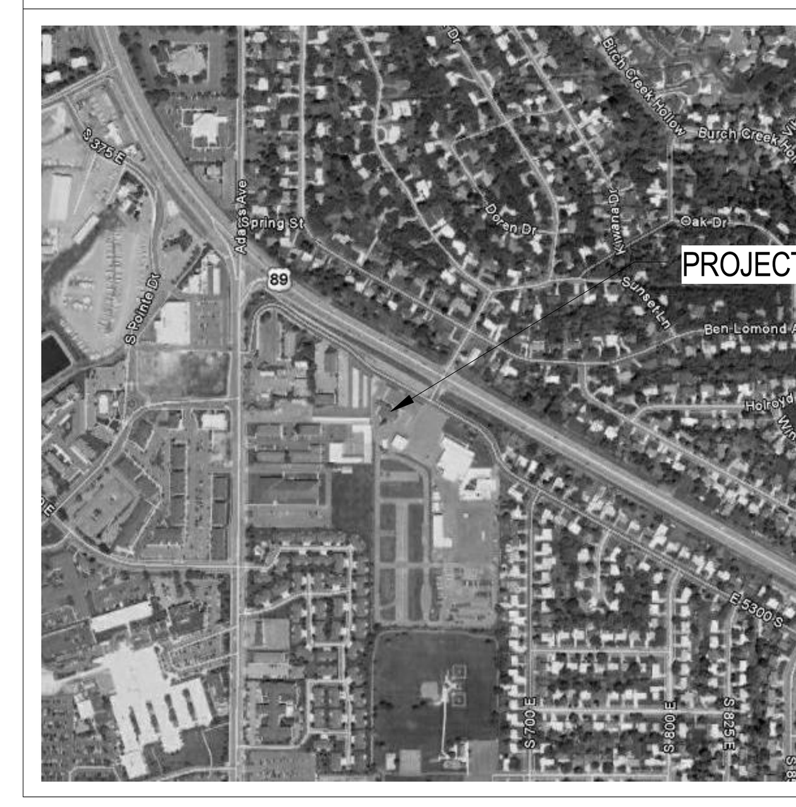
Division of Facilities Construction and Management

Phase ______ Program __ Yes __ No

	Approved as noted	Reject Resubmit	No Comment	Initial	Date
Accessibility					
Architectural					
Civil					
Electrical					
Energy					
HVAC					
Landscape					
Plumbing					
Specification					
Structural					

APPROVAL DOES NOT RELIEVE A/E OF DESIGN LIABILITY

VICINITY MAP



ABBREVIATIONS

A	
AC	ACOUSTIC
ADD	ADDENDUM
A/C	AIR CONDITIONING
ALT.	ALTERNATE
AL	ALUMINUM
A.B.	ANCHOR BOLT
&	AND
ARCH	ARCHITECT(URAL)
ASP.	ASPHALT
@	AT
B	
BSMT.	BASEMENT
B.M.	BENCHMARK
BLKG.	BLOCKING
BD.	BOARD
B.O.	BOTTOM OF
BLDG.	BUILDING
C	
CAB'T	CABINET
C.I.P.	CAST IN PLACE
C.B.	CATCH BASIN
CLG.	CEILING
CL	CENTER LINE
C.T.	CERAMIC TILE
CH	CHANNEL
C.O.	CLEAN OUT
CLR.	CLEAR
CL.	CLOSET
COL.	COLUMN
CONC.	CONCRETE
CMU	CONCRETE MASONRY UNIT
COND.	CONDITION
CONN.	CONNECTION
CONST.	CONSTRUCTION
CONT	CONTINUOUS
CJ	CONTROL JOINT
D	
D.P.	DAMP PROOFING
D.B.	DECK BEARING
DIAG.	DIAGONAL
DIA.	DIAMETER
DIM.	DIMENSION
DISP.	DISPENSER
DWL.	DOWEL
DN.	DOWN
D.S.	DOWN SPOUT
D.W.V.	DRAINAGE WASTE VENT
DWG.	DRAWING
E	
EA.	EACH
E.W.C.	ELEC. WATER COOLER
EL.	ELECTRIC
ELEV.	ELEVATION
EQ.	EQUAL
EQUIP.	EQUIPMENT
EXH.	EXHAUST
EXIST.	EXISTING
E.J.	EXPANSION JOINT
EXT.	EXTERIOR
F	
FT.	FEET
FIN.	FINISH(ED)
F.E.	FIRE EXTINGUISHER
F.E.C.	FIRE EXTINGUISHER CABINET
FIXT.	FIXTURE
FL.	FLASHING
G	
GALV.	GALVANIZED
GA.	GAUGE
G.C.	GENERAL CONTRACTOR
G.S.N.	GENERAL STRUCTURAL NOTES
GL.	GLASS
GD.	GRADE
GRL.	GRILLE
GRD.	GROUND
GYP.	GYPSUM
H	
HDW.	HARDWARE
HDWD.	HARDWOOD
HTR.	HEATER
HT.	HEIGHT
H.P.	HIGH POINT
H.M.	HOLLOW METAL
HORIZ.	HORIZONTAL
H.B.	HOSE BIB
H.W.	HOT WATER
HR.	HOUR
I	
IN.	INCH
I.D.	INSIDE DIAMETER
INSUL.	INSULATION
INT.	INTERIOR
INV.	INVERT
J	
JAN.	JANITOR
JT.	JOINT
JST.	JOIST
L	
LAM.	LAMINATED
LDG.	LANDING
LAV.	LAVATORY
LT.	LIGHT
L.W.C.	LIGHT WEIGHT CONCRETE
LVR.	LOUVER
M	
M.B.	MACHINE BOLT
MFR.	MANUFACTURER
M.O.	MASONRY OPENING
MAT'L	MATERIAL
MAX.	MAXIMUM
MECH.	MECHANICAL
MTL.	METAL
MIN.	MINIMUM
MLDG.	MOLDING
MULL.	MULLION
N	
N.G.	NATURAL GRADE
NOM.	NOMINAL
N/A	NOT APPLICABLE
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
O	
O.C.	ON CENTER
OPNG.	OPENING
O.D.	OUTSIDE DIAMETER
O.F.S.	OVERFLOW SCUPPER
O.F.C.I.	OWNER FURNISHED, CONTRACTOR INSTALLED
P	
PT.	PAINT
PTD.	PAINTED
PR.	PAIR
PNL.	PANEL
d	PENNY
P.L.	PLASTIC LAMINATE
PL.	PLATE
PLBG.	PLUMBING
P.C.	PLUMBING CONTRACTOR
PLYW'D	PLYWOOD
P.S.I.	POUND PER SQUARE INCH
P.S.F.	POUNDS PER SQUARE FOOT
R	
RAD.	RADIUS
REC.	RECOMMENDATION
REG.	REGISTER
REQ'D	REQUIRED
R.A.	RETURN AIR
REV.	REVISION
R.D.	ROOF DRAIN
RFG.	ROOFING
RM.	ROOM
RGH.	ROUGH
RND.	ROUND
S	
SCR.	SCREW
SECT.	SECTION
SEL.	SELECT
SHT.	SHEET
SIM.	SIMILAR
SLDG.	SLIDING
SM.	SMOOTH
SPEC.	SPECIFICATION
SPL.	SPLASH
SQ.	SQUARE
S.S.	STAINLESS STEEL
STD.	STANDARD
STRUC.	STRUCTURE
S.A.	SUPPLY AIR
SUSP.	SUSPENDED
SW.BD.	SWITCHBOARD
T	
TELCO	TELEPHONE COMPANY
T.G.	TEMPERED GLASS
T&G	TONGUE & GROOVE
T&B	TOP & BOTTOM
T.O.	TOP OF
T.O.C.	TOP OF CURB
T.O.D.	TOP OF DECK
T.O.P.	TOP OF PARAPET
TYP.	TYPICAL
U	
U.N.O.	UNLESS NOTED OTHERWISE
V	
V.	VENT
V.T.R.	VENT THROUGH ROOF
VERT.	VERTICAL
V.G.	VERTICAL GRAIN
VEST.	VESTIBULE
V.C.T.	VINYL COMPOSITION TILE
V.C.P.	VITREOUS CLAY PIPE
W	
W.C.	WATER CLOSET
W.H.	WATER HEATER
W.P.	WATER PROOF
W.R.	WATER RESISTANT
W.W.F.	WELDED WIRE FABRIC
W.F.	WIDE FLANGE
WDW.	WINDOW
W/	WITH
W/O	WITHOUT
WD.	WOOD

MATERIALS / SYMBOLS

Material	Symbol	Description
PLYWOOD (SECTION)	℄	CENTERLINE
WOOD MOLDING	1 AEXXXa SIM	BUILDING SECTION FLAG
CONCRETE (SECTION)	1 AEXXXa SIM	WALL SECTION / EXTERIOR ELEVATION
GYPSUM BOARD (SECTION)	1 AE 101	INTERIOR ELEVATION
TILE (PLAN)	1 AEXXXa SIM	DETAIL
COMPACTED GRAVEL (SECTION)	A	GRID HEAD
COMPACTED SUBGRADE	1i	WINDOW TAG
STEEL FRAMING (PLAN, SECTION)	101A	DOOR TAG
CMU (PLAN, SECTION)	ROOM 101	ROOM TAG
BRICK VENEER (PLAN, SECTION)	1	KEYNOTE TAG
RIGID INSULATION (SECTION)	1	REVISION TAG
	G3	WINDOW GLAZING SCHEDULE
	1	WALL TYPE
	ELEVATION NAME	ELEVATION, (DATUM)
	1 AEXXXa VIEW NAME SCALE SCALE	DRAWING TITLE

DESIGN TEAM

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DRAWING INDEX

CONSTRUCTION DOCUMENTS

DLD - OGDEN

SOUTH OGDEN, UTAH

JRCA ARCHITECTS
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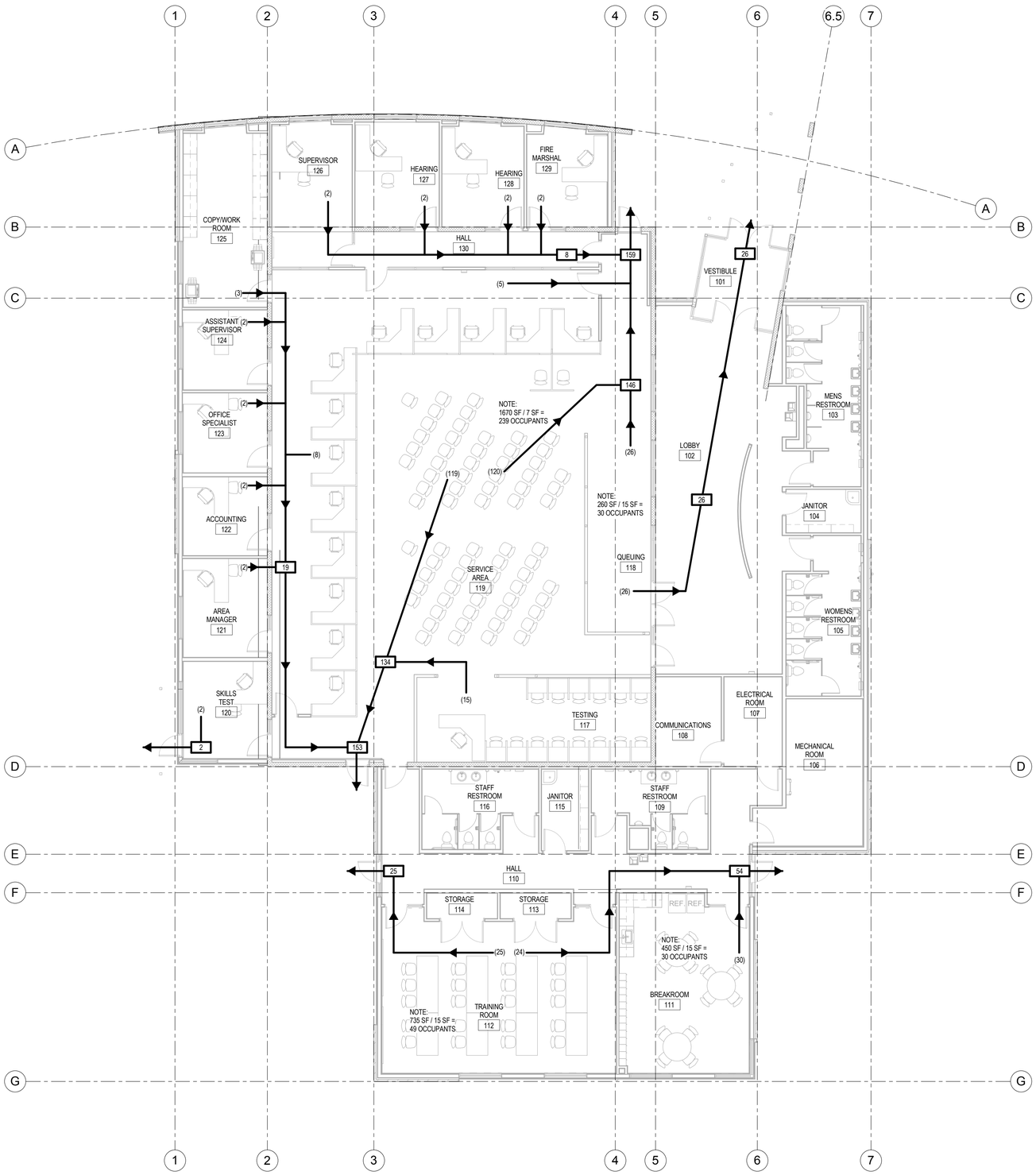
Salt Lake City, Utah 84111
(801) 533-2100 fax: 533-2101 jrcadesign.com

DATE/REVISION	PROJECT #.
11-24-2010	10019

GENERAL INFORMATION

GI101



CODE COMPLIANCE PLAN
SCALE 1/8" = 1'-0"

PROJECT NORTH

CODE ANALYSIS

APPLICABLE CODES

	Year		Year
International Building Code	2009	National Electrical Code	2008
International Mechanical Code	2009	Uniform Code for	
International Fuel Gas Code	2009	Building Conservation	2009
International Plumbing Code	2009	ADA Accessibility	
International Fire Code	2009	Guidelines	2009
International Energy Conservation Code	2009		

A. Occupancy and Group: A-3 B

Change in Use: Yes ____ No X Mixed Occupancy: Yes ____ No X
Special Use and Occupancy (e.g. High Rise, Covered Mall): NONE

B. Seismic Design Category: C Design Wind Speed: 90 mph

C. Type of Construction (circle one):

I A I B II A II B III A III B IV A V B

D. Fire Resistance Rating Requirements for the Exterior Walls based on the fire separation distance (in hours):
North: 0 South: 0 East: 0 West: 0

E. Mixed Occupancies: YES Nonseparated Uses: YES

F: Sprinklers:
Required: YES Provided: YES
Type of Sprinkler System (IBC 903.3.1) NFPA 13

G: Number of Stories: 1 Building Height: 21 FEET

H: Actual Area per Floor (square feet): 10,693

I: Tabular Area: (table 503): 6,000

J: Area Modifications:

a) $A_a = \left\{ A_t + \left[A_t \times I_f \right] + \left[A_t \times I_a \right] \right\}$ $I_f = \left[F/P - 0.25 \right] W / 30$

$A_a = \{ 6,000 + [6,000 \times 0] + [6,000 \times 2] \} = 18,000$

b) Sum of the Ratio Calculations for Mixed Occupancies:

$\frac{\text{Actual Area}}{\text{Allowable Area}} \leq 1$ $\frac{10,693}{18,000} \leq 1$

c) Total Allowable Area for:
1) One Story: 18,000
2) Two Story: $A_a(2)$ ____
3) Three Story: $A_a(3)$ ____

d) Unlimited Area Building: Yes ____ No X Code Section: ____

K. Fire Resistance Rating Requirements for Building Elements (hours).

Element	Hours	Assembly Listing	Element	Hours	Assembly Listing
Exterior Bearing Walls	0		Floors - Ceiling Floors	0	
Interior Bearing Walls	0		Roofs - Ceiling Roofs	0	
Exterior Non-Bearing Walls	0		Exterior Doors and Windows	0	
Structural Frame	0		Shaft Enclosures	0	
Partitions - Permanent	0		Fire Walls	0	
Fire Barriers	0		Fire Partitions	0	
	0		Smoke Partitions	0	

L. Design Occupant Load: 419
Exit Width Required: 84" Exit Width Provided: 192"

M. Minimum Number of Required Plumbing Facilities:
a) Water Closets - Required (m) 4 (f) 5 Provided (m) 5 (f) 7
b) Urinals - Required (m) ____ (f) ____ Provided (m) 4 (f) ____
c) Lavatories - Required (m) 3 (f) 3 Provided (m) 6 (f) 6
d) Bath Tubs or Showers: 0
e) Drinking Fountains: 2 Service Sinks: 2

FOOTNOTES:

1) In case of conflict with the U.S. Department of Justice Federal Registers Parts I through V - ADA Guidelines and specific reference to the International Building Code Accessibility Chapters, the more restrictive requirement shall govern.

2) Additional Code Information shall be provided at the discretion of the Building Official for Complex Buildings. Including, but not limited to:
a) High Rise Requirements.
b) Atriums.
c) Performance Based Criteria.
d) Means or Egress Analysis.
e) Fire Assembly Locator Sheet.
f) Exterior and Interior Accessibility Route.
g) Fire Stopping, Including Tested Design Number.

DEFERRED SUBMITTALS

1. SEISMIC RESTRAIN PROVISIONS OF IBC 1613.1 FOR ELECTRICAL SYSTEMS, DETAILS AND ENGINEERING CALCULATIONS FOR NON STURCTURAL COMPONENTS PERMANENTLY ATTACHED TO STRUCTURE; FEBRUARY 15, 2011

2. FIRE ALARM SUBMITTALS; FEBRUARY 15, 2011

3. GYPSUM BOARD CEILING SUSPENSION SYSTEM SUBMITTALS; MARCH 15, 2011

4. FIRE SPRINKLER SUBMITTALS; FEBRUARY 15, 2011

NOTE: DEFERRED SUBMITTALS SHALL BE SUBMITTED TO THE BUILDING OFFICIAL FOR REVIEW WITH AN ACCOMPANIED LETTER FROM THE ARCHITECT STATING THAT THE SUBMITTALS ARE IN CONFORMANCE WITH THE DESIGN. WORK RELATED TO THE DEFERRED SUBMITTAL SHALL NOT COMMENCE UNTIL BUILDING OFFICIAL HAS APPROVED THE SUBMITTAL.

NOTE:
1. THESE DOCUMENTS COMPLY WITH DFCM STANDARDS
2. THESE PLANS HAVE BEEN SUBMITTED TO THE STATE FIRE MARSHAL.

LEGEND:

(10) OCCUPANT LOAD

COMBINED OCCUPANT LOAD ALONG PATH OF EGRESS

CONSTRUCTION DOCUMENTS

DLD - OGDEN

SOUTH OGDEN, UTAH

JRCA
ARCHITECTS
577 South 200 East
Salt Lake City, Utah 84111
(801) 533-2100 fax: 533-2101 jrcadesign.com

DATE/REVISION	PROJECT #.
11-24-2010	10019

CODE ANALYSIS

GI111

SPECIAL INSPECTION AND TESTING UNDER THE PROVISIONS OF 2009 IBC Section 1704 AND FOR MISCELLANEOUS AREAS

Indicate required Special inspections for project by checking the appropriate boxes and provide specific instructions as to the inspection requirements and the expectations of the architect, engineer and owner:

FABRICATORS (IBC 1704.2)

☐ Approved Fabricator	Yes	No

☐ Unapproved Fabricator	Yes	No

Fabricators Name:	
Fabricators plant location	
Required In-plant Inspections	☐ Steel Construction ☐ Welding ☐ Details

STEEL (IBC 1704.3)

Item			Detailed Instructions and Frequencies
High Strength Bolting(1704.3.3)	☐ Continuous	☑ Periodic	
WELDING (1704.3.1)			
Details (1704.3.2)			
Complete & partial penetration groove welds	☑ Continuous	☐ Periodic	
Multipass fillet welds	☑ Continuous	☐ Periodic	
Single-pass fillet welds > 5/16"	☑ Continuous	☐ Periodic	
Single-pass fillet welds ≤ 5/16"	☐ Continuous	☑ Periodic	
Floor & roof deck welds	☐ Continuous	☑ Periodic	
REINFORCEMENT STEEL	☐ Continuous		
Verification of weldability	☐ Continuous	☐ Periodic	
Shear wall and shear reinforcement	☐ Continuous	☐ Periodic	
Other reinforcement	☐ Continuous	☐ Periodic	
Steel frame joint details	☐ Continuous	☐ Periodic	

CONCRETE CONSTRUCTION (IBC 1704.4)

Item			Detailed Instructions and Frequencies
Materials (1704.4.1)	☐ Continuous	☑ Periodic	
Steel placement	☐ Continuous	☑ Periodic	
Steel welding	☐ Continuous	☐ Periodic	
Bolts prior & during placement	☑ Continuous	☐ Periodic	
Use of required design mix	☐ Continuous	☑ Periodic	
Concrete sampling for strength test, slump, air content, and temperature of concrete	☑ Continuous	☐ Periodic	
Concrete & shotcrete placement	☑ Continuous	☐ Periodic	
Curing temperature and techniques	☐ Continuous	☑ Periodic	
Pre-stressed concrete	☐ Continuous	☐ Periodic	
Pre-cast concrete	☐ Continuous	☐ Periodic	
Posttensioned concrete	☐ Continuous	☐ Periodic	
Form work	☐ Continuous	☑ Periodic	

MASONRY CONSTRUCTION (IBC 1704.5)

Item			Detailed Instructions and Frequencies
As masonry construction begins:			
Indicate Category	I	(II)	
Site prepared mortar	☐ Continuous	☑ Periodic	
Construction of mortar joints	☐ Continuous	☑ Periodic	
Location of reinforcement, connectors, pre-stressing tendons and anchorages	☐ Continuous	☑ Periodic	
Pre-stressing technique	☐ Continuous	☐ Periodic	
Grade and size of pre-stressing tendons and anchorages	☐ Continuous	☐ Periodic	
Inspection program verify:			
Size and location of structural elements	☐ Continuous	☑ Periodic	
Type, size and location of anchors	☐ Continuous	☑ Periodic	
Size, grade and type of reinforcement	☐ Continuous	☑ Periodic	
Welding of reinforcement	☐ Continuous	☐ Periodic	
Cold and hot weather protection	☐ Continuous	☑ Periodic	
Application and measurement of pre-stressing force	☐ Continuous	☐ Periodic	
Prior to grouting verify			
Clean grout space	☐ Continuous	☑ Periodic	
Placement of reinforcement	☐ Continuous	☑ Periodic	
Grout mix	☐ Continuous	☑ Periodic	
Mortar joints	☐ Continuous	☑ Periodic	
Grout placement	☑ Continuous	☐ Periodic	
Grout and mortar specimens and prisms	☑ Continuous	☐ Periodic	
Construction and submittal compliance verification	☐ Continuous	☑ Periodic	
Empirical masonry – Cat. I-III (1708.1.1)	☐ Continuous	☐ Periodic	
Empirical masonry – Cat. IV (1708.1.1)	☐ Continuous	☐ Periodic	
Engineered masonry – Cat. I-III 1708.1.1	☑ Continuous	☐ Periodic	
Engineered masonry – Cat. IV (1708.1.1)	☐ Continuous	☐ Periodic	
Engineering & pre-stressing steel (1708.3)	☐ Continuous	☐ Periodic	
Structural steel (1708.4)	☐ Continuous	☐ Periodic	
Qualification of mechanical & electrical equipment (1708.5)	☐ Continuous	☐ Periodic	
Seismically isolated structures (1708.6)	☐ Continuous	☐ Periodic	
Testing for seismic resistance is	☐ Continuous	☐ Periodic	

WOOD CONSTRUCTION (IBC 1704.6)

Item			Detailed Instructions and Frequencies
Prefabricated elements & assembly	☐ Continuous	☐ Periodic	

SOILS CONSTRUCTION (IBC 1704.7)

Item			Detailed Instructions and Frequencies
Site preparation	☐ Continuous	☐ Periodic	NOT REQUIRED
Structural fill material	☐ Continuous	☑ Periodic	TESTING AGENCY WILL TEST COMPACTION OF SOILS IN PLACE ACCORDING TO ASTM D 1556, ASTM D 2167, ASTM D 2922 AND ASTM D 2937, AS APPLICABLE. TEST WILL BE PERFORMED AT THE FOLLOWING LOCATIONS AND FREQUENCIES: PAVED AND BUILDING SLAB AREAS: AT SUBGRADE AND AT EACH COMPACTED FILL AND BACKFILL LAYER. AT LEAST 1 TEST FOR EVERY 2000 SF FOR LESS OF PAVED ARE OR BUILDING SLAB, BUT IN NO CASE FEWER THAN 3 TESTS. FOOTING AREAS: AT SUBGRADE AND AT EACH COMPACTED FILL AND BACKFILL LAYER. AT LEAST 1 TEST FOR EVERY 500 SF OR LESS OF FOOTING AREA, BUT IN NO CASE FEWER THAN 3 TESTS.
Structural fill lift thickness	☐ Continuous	☑ Periodic	TESTING AGENCY WILL TEST COMPACTION OF SOILS IN PLACE ACCORDING TO ASTM D 1556, ASTM D 2167, ASTM D 2922 AND ASTM D 2937, AS APPLICABLE. TEST WILL BE PERFORMED AT THE FOLLOWING LOCATIONS AND FREQUENCIES: PAVED AND BUILDING SLAB AREAS: AT SUBGRADE AND AT EACH COMPACTED FILL AND BACKFILL LAYER. AT LEAST 1 TEST FOR EVERY 2000 SF FOR LESS OF PAVED ARE OR BUILDING SLAB, BUT IN NO CASE FEWER THAN 3 TESTS. FOOTING AREAS: AT SUBGRADE AND AT EACH COMPACTED FILL AND BACKFILL LAYER. AT LEAST 1 TEST FOR EVERY 500 SF OR LESS OF FOOTING AREA, BUT IN NO CASE FEWER THAN 3 TESTS.
Structural fill soil densities	☐ Continuous	☑ Periodic	TESTING AGENCY WILL TEST COMPACTION OF SOILS IN PLACE ACCORDING TO ASTM D 1556, ASTM D 2167, ASTM D 2922 AND ASTM D 2937, AS APPLICABLE. TEST WILL BE PERFORMED AT THE FOLLOWING LOCATIONS AND FREQUENCIES: PAVED AND BUILDING SLAB AREAS: AT SUBGRADE AND AT EACH COMPACTED FILL AND BACKFILL LAYER. AT LEAST 1 TEST FOR EVERY 2000 SF FOR LESS OF PAVED ARE OR BUILDING SLAB, BUT IN NO CASE FEWER THAN 3 TESTS. FOOTING AREAS: AT SUBGRADE AND AT EACH COMPACTED FILL AND BACKFILL LAYER. AT LEAST 1 TEST FOR EVERY 500 SF OR LESS OF FOOTING AREA, BUT IN NO CASE FEWER THAN 3 TESTS.
Backfill soils materials	☐ Continuous	☑ Periodic	TESTING AGENCY WILL TEST COMPACTION OF SOILS IN PLACE ACCORDING TO ASTM D 1556, ASTM D 2167, ASTM D 2922 AND ASTM D 2937, AS APPLICABLE.
Backfill soil densities	☐ Continuous	☑ Periodic	TESTING AGENCY WILL TEST COMPACTION OF SOILS IN PLACE ACCORDING TO ASTM D 1556, ASTM D 2167, ASTM D 2922 AND ASTM D 2937, AS APPLICABLE.

PIER FOUNDATIONS (IBC 1704.9)

Item			Detailed Instructions and Frequencies
Observe drilling operation and reporting	☐ Continuous	☐ Periodic	NOT REQUIRED
Verify placement & installation data	☐ Continuous	☐ Periodic	NOT REQUIRED

SPRAYED FIRE-RESISTANT MATERIALS (IBC 1704.10)

Item			Detailed Instructions and Frequencies
Structural member surface conditions	☐ Continuous	☐ Periodic	NOT REQUIRED
Material application	☐ Continuous	☐ Periodic	NOT REQUIRED
Material thickness	☐ Continuous	☐ Periodic	NOT REQUIRED
Material density	☐ Continuous	☐ Periodic	NOT REQUIRED
Bonding strength	☐ Continuous	☐ Periodic	NOT REQUIRED

MASTIC AND INTUMESCENT FIRE-RESISTANT COATINGS (IBC 1704.11)

Item			Detailed Instructions and Frequencies
Material and installation	☐ Continuous	☐ Periodic	

EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS) (IBC 1704.12)

Item			Detailed Instructions and Frequencies
Material and installation	☐ Continuous	☐ Periodic	NOT REQUIRED

ALTERNITIVE CONSTRUCTION METHODS OR MATERIALS (IBC 1704.13)

Item			Detailed Instructions and Frequencies
Material and installation	☐ Continuous	☐ Periodic	NOT REQUIRED

EPOXY (IBC 1704.13)

Item			Detailed Instructions and Frequencies
Material and installation (specify locations)	☐ Continuous	☐ Periodic	INSPECT ANCHOR DRILLED HOLE DIA. & DEPTH ACCORDING TO MANUF. INSTRUCTIONS PRIOR TO INSTALLATION

SMOKE CONTROL (IBC 1704.14)

Item			Detailed Instructions and Frequencies
Material	☐ Continuous	☐ Periodic	NOT REQUIRED
Installation	☐ Continuous	☐ Periodic	NOT REQUIRED

Special inspection for seismic resistance (IBC 1707)

Item			Detailed Instructions and Frequencies
Structural Steel (1707.2)	☐ Continuous	☐ Periodic	NOT REQUIRED
Structural Wood (1707.3)	☐ Continuous	☐ Periodic	NOT REQUIRED
Cold–formed steel framing (1707.4)	☐ Continuous	☐ Periodic	NOT REQUIRED
Pier foundations (1707.5)	☐ Continuous	☐ Periodic	NOT REQUIRED
Storage racks & access floors (1707.6)	☐ Continuous	☐ Periodic	NOT REQUIRED
Architectural components (1707.7)	☐ Continuous	☐ Periodic	
Mechanical & electrical items (1707.8)	☐ Continuous	☐ Periodic	
Designated systems verification (1707.9)	☐ Continuous	☐ Periodic	NOT REQUIRED
Seismic isolation systems (1707.10)	☐ Continuous	☐ Periodic	NOT REQUIRED

MISCELLANEOUS AREAS

These inspections are recommended by the Architect/Engineer and approved by DFCM.

			Detailed Instructions and Frequencies
Suspended Ceiling Grid Clips	☐ Continuous	☐ Periodic	NOT REQUIRED
Suspended Ceiling wire spacing (Seismic)	☐ Continuous	☐ Periodic	NOT REQUIRED
Soils backfill (specify locations and frequency)	☐ Continuous	☐ Periodic	
Soils for curb and gutter (specify locations and frequency)	☐ Continuous	☐ Periodic	
Soils for parking lots (specify locations and frequency)	☐ Continuous	☐ Periodic	
Soils for utility trench backfill	☐ Continuous	☐ Periodic	
Reinforcement for slab on grade sidewalks and drive approaches (specify locations and frequency)	☐ Continuous	☐ Periodic	NOT REQUIRED
Reinforcement for interior slab on grade (specify locations and frequency)	☐ Continuous	☐ Periodic	NOT REQUIRED
Concrete testing for slab on grade sidewalks and drive approaches (specify locations and frequency)	☐ Continuous	☐ Periodic	
Concrete testing for interior slab on grade (specify locations and frequency)	☐ Continuous	☐ Periodic	
Masonry Veneer (specify locations and frequency)	☐ Continuous	☐ Periodic	NOT REQUIRED
Asphalt inspection (specify locations and frequency)	☐ Continuous	☐ Periodic	
Asphalt testing (specify locations and frequency)	☐ Continuous	☐ Periodic	
Inspection of seismic resistance (specify locations and frequency)	☐ Continuous	☑ Periodic	INSPECT SHEAR WALL & ROOF DIAPHRAGM NAILING, HOLDOWNS AND DRAG STRUTS
Steam and water line welding (specify locations and frequency)	☐ Continuous	☐ Periodic	NOT REQUIRED
Seismic supports for duct work and sealing of joints for duct	☐ Continuous	☐ Periodic	NOT REQUIRED

work			
Seismic supports for electrical raceways, cable trays and lights	☐ Continuous	☐ Periodic	NOT REQUIRED
Seismic supports for plumbing lines including gas, water and steam and condensation	☐ Continuous	☐ Periodic	NOT REQUIRED
Seismic bracing for mechanical units both on slab and suspended	☐ Continuous	☐ Periodic	NOT REQUIRED
	☐ Continuous	☐ Periodic	
	☐ Continuous	☐ Periodic	
	☐ Continuous	☐ Periodic	
	☐ Continuous	☐ Periodic	
	☐ Continuous	☐ Periodic	
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	☐ Continuous	☐ Periodic	
	☐ Continuous	☐ Periodic	
	☐ Continuous	☐ Periodic	
	☐ Continuous	☐ Periodic	

Special Inspectors Shall:

- Be approved by the Building Official prior to performing any duties;
- Provide proof of licensure as a special inspector by the State of Utah for each type of inspection;
- Inspection reports are to meet the requirements of IBC 1704.1.2 and DFCM standards;
- Inspection reports are to be submitted to the code consultant, architect, DFCM project manager, and the State of Utah Building Official within 48 hrs. of inspections;
- A final inspection report shall be submitted following completion of the project documenting the types of special inspections performed and a statement indicating that the structure is in compliance with the drawings, specifications and applicable codes. IBC 1704.1.2

Updated July 29, 2010

CONSTRUCTION DOCUMENTS

DLD - OGDEN

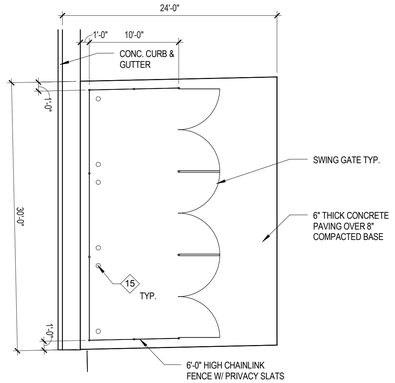
SOUTH OGDEN, UTAH

JRCA
ARCHITECTS
577 South 200 East
Salt Lake City, Utah 84111
(801) 533-2100 fax: 533-2101 jrcadesign.com

DATE/REVISION	PROJECT #.
11-24-2010	10019

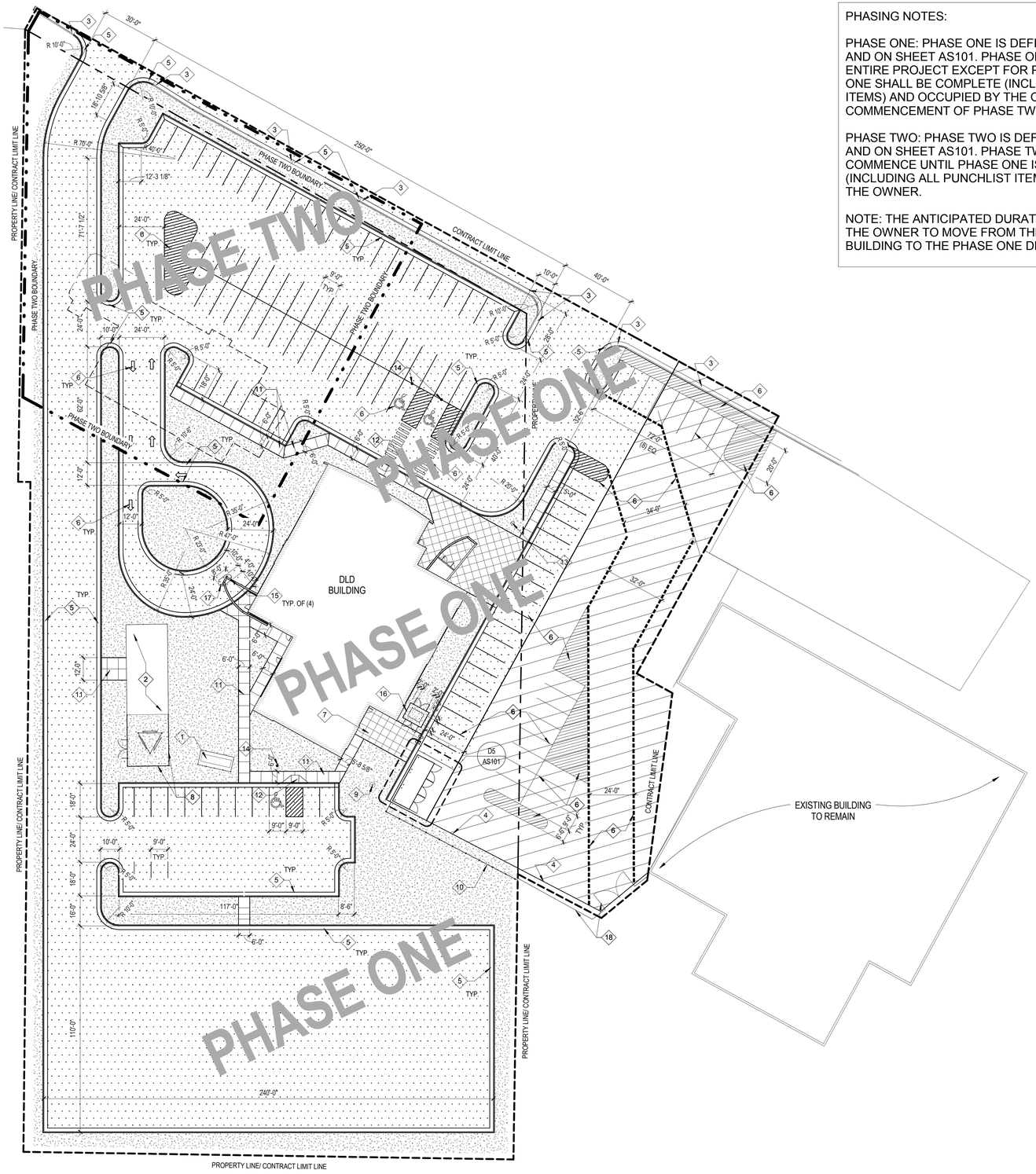
INSPECTION CHECKLIST

GI112



D5 / AS101 ENLARGED DUMPSTER AREA

SCALE 1/8" = 1'-0"



ARCHITECTURAL SITE PLAN

SCALE 1" = 30'-0"

NORTH

PHASING NOTES:

PHASE ONE: PHASE ONE IS DEFINED ON THIS SHEET AND ON SHEET AS101. PHASE ONE INCLUDES THE ENTIRE PROJECT EXCEPT FOR PHASE TWO. PHASE ONE SHALL BE COMPLETE (INCLUDING ALL PUNCHLIST ITEMS) AND OCCUPIED BY THE OWNER PRIOR TO COMMENCEMENT OF PHASE TWO WORK.

PHASE TWO: PHASE TWO IS DEFINED ON THIS SHEET AND ON SHEET AS101. PHASE TWO WORK SHALL NOT COMMENCE UNTIL PHASE ONE IS COMPLETE (INCLUDING ALL PUNCHLIST ITEMS) AND OCCUPIED BY THE OWNER.

NOTE: THE ANTICIPATED DURATION REQUIRED FOR THE OWNER TO MOVE FROM THE EXISTING DLD BUILDING TO THE PHASE ONE DLD BUILDING IS 7 DAYS.

GENERAL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING LANDSCAPING AND SITE IMPROVEMENTS INDICATED TO REMAIN, WHICH ARE TO REMAIN FREE FROM DAMAGE DURING CONSTRUCTION BOTH INSIDE AND OUTSIDE THE CONRACT LIMIT LINE. CONTRACTOR SHALL REPAIR OR REPLACE ANY DAMAGED ITEM OR SITE IMPROVEMENTS AS SPECIFIED, OR IF NOT SPECIFIED, TO MATCH EXISTING ADJACENT CONSTRUCTION.
2. CONTRACTOR SHALL VERIFY EXACT LOCATION OF ALL UTILITIES AND SITE IMPROVEMENTS WHICH ARE AFFECTED BY, OR WHICH TIE-IN WITH NEW CONSTRUCTION.
3. PROVIDE TEMPORARY 6'-0" (MIN.) HIGH CHAINLINK FENCE AT PROJECT LIMIT LINE, COMPLETE WITH GATES AS REQUIRED, UNLESS NOTED OTHERWISE.
4. EXISTING ROAD, PARKING, SERVICE DRIVES, AND SIDEWALKS SHALL REMAIN ACCESSIBLE AND BE KEPT CLEAR OF CONSTRUCTION EQUIPMENT MATERIALS, MUD, DIRT, AND OTHER DEBRIS.
5. SEE CIVIL AND LANDSCAPE DRAWINGS FOR EXTENT OF SITE WORK.
6. CONTRACT LIMIT LINE DOES NOT PERTAIN TO SITE UTILITIES.

KEY NOTES:

1 EXISTING PROPANE TANK TO REMAIN
2 EXISTING RADIO EQUIPMENT BUILDING TO REMAIN
3 EXISTING CURB AND GUTTER TO REMAIN
4 LINE OF EXISTING ASPHALT TO REMAIN
5 CONCRETE CURB AND GUTTER, SEE CIVIL DRAWINGS
6 PAVEMENT MARKINGS
7 4" THICK CONCRETE PAVING W/ 4'-0" X 4'-0" CONTROL JOINT PATTERN
8 PROVIDE AND INSTALL PRIVACY SLATS TO EXISTING CHAINLINK FENCE AND GATES
9 EXISTING FIRE HYDRANT TO REMAIN.
10 6' HIGH CHAIN LINK FENCE AND GATE W/ PRIVACY SLATS
11 4" THICK CONCRETE PAVING; SEE CIVIL DRAWINGS
12 ADA COMPLIANT SIDEWALK RAMP; SEE C1/AE501
13 FLAGPOLE; OWNER PROVIDED CONTRACTOR INSTALLED; SEE A3/AE501
14 ADA PARKING SIGN; SEE A1/AE501.
15 BOLLARD; SEE A2/AE501
16 6'-0" HIGH CHAINLINK FENCE WITH PRIVACY SLATS W/ (2)DOUBLE 6'-0" WIDE SWING GATES
17 3'-0" THICK CONCRETE ISLAND W/ (2) #5 TOP AND BOTTOM; TOP OF ISLAND ELEVATION: 100'-0". PROVIDE 1" RADIUS AT EXPOSED CORNERS
18 EXISTING FENCE AND GATES TO REMAIN

LEGEND:

LANDSCAPED AREA; SEE LANDSCAPE PLAN

EXISTING ASPHALT TO REMAIN; THIS AREA TO REMAIN CLEAR DURING CONSTRUCTION. THIS AREA SHALL NOT BE USED FOR CONSTRUCTION STAGING

ASPHALT PAVING; SEE CIVIL DRAWINGS

PHASE TWO BOUNDARY

CONSTRUCTION DOCUMENTS

DLD - OGDEN

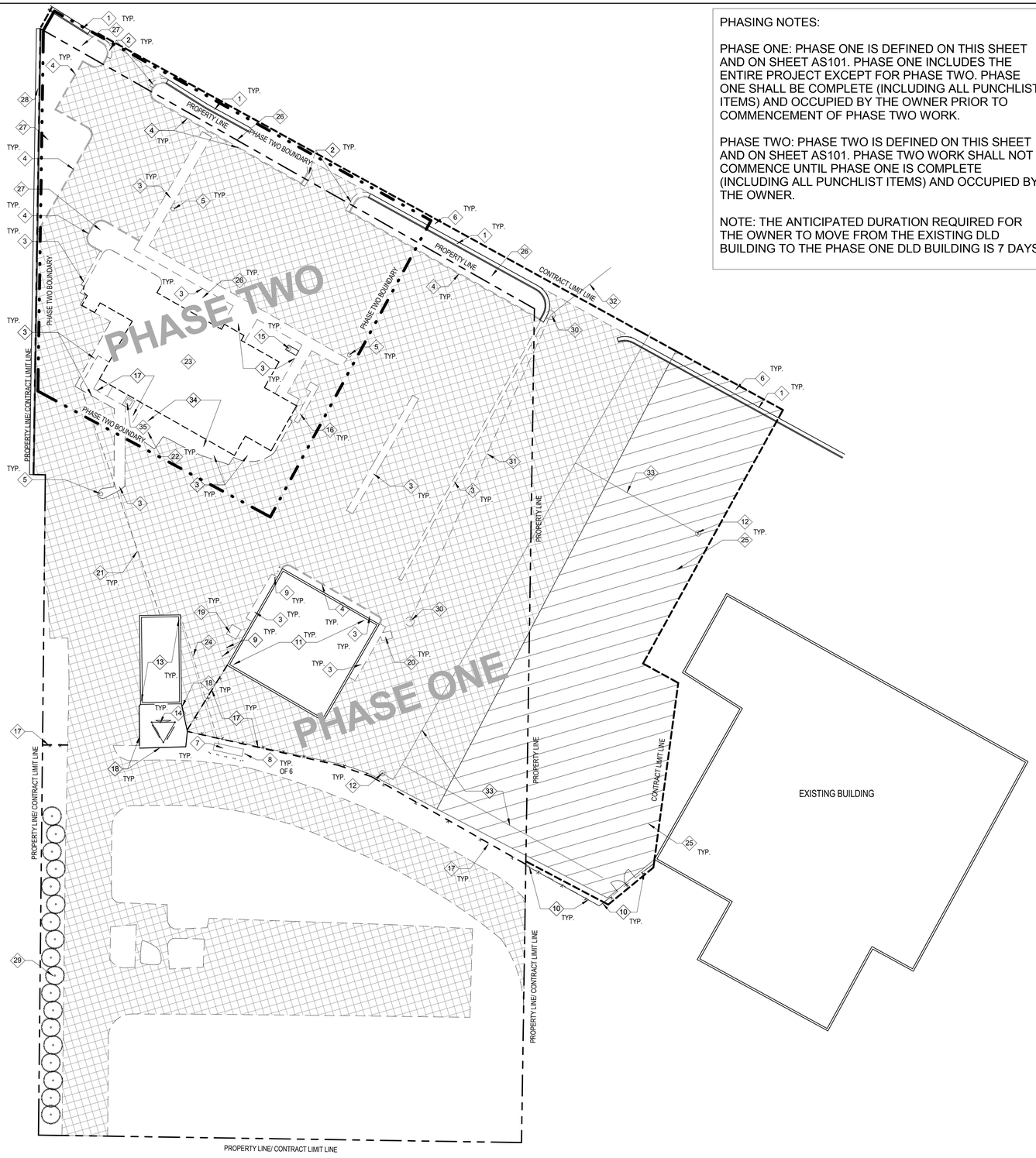
SOUTH OGDEN, UTAH

JRCA
ARCHITECTS
577 South 200 East
Salt Lake City, Utah 84111
(801) 533-2100 fax: 533-2101 jrcadesign.com

DATE/REVISION	PROJECT #.
11-24-2010	10019

ARCHITECTURAL SITE PLAN

AS101



SITE PLAN - DEMOLITION
SCALE 1" = 30'-0"

PHASING NOTES:

PHASE ONE: PHASE ONE IS DEFINED ON THIS SHEET AND ON SHEET AS101. PHASE ONE INCLUDES THE ENTIRE PROJECT EXCEPT FOR PHASE TWO. PHASE ONE SHALL BE COMPLETE (INCLUDING ALL PUNCHLIST ITEMS) AND OCCUPIED BY THE OWNER PRIOR TO COMMENCEMENT OF PHASE TWO WORK.

PHASE TWO: PHASE TWO IS DEFINED ON THIS SHEET AND ON SHEET AS101. PHASE TWO WORK SHALL NOT COMMENCE UNTIL PHASE ONE IS COMPLETE (INCLUDING ALL PUNCHLIST ITEMS) AND OCCUPIED BY THE OWNER.

NOTE: THE ANTICIPATED DURATION REQUIRED FOR THE OWNER TO MOVE FROM THE EXISTING DLD BUILDING TO THE PHASE ONE DLD BUILDING IS 7 DAYS.

KEY NOTES:

1. EXISTING CURB AND GUTTER TO REMAIN
2. EXISTING CURB AND GUTTER TO BE REMOVED
3. EXISTING CONCRETE TO BE REMOVED
4. EXISTING CONCRETE CURB TO BE REMOVED
5. EXISTING LIGHT POLE AND BASE TO BE REMOVED
6. VERIFY EXTENT OF ASPHALT PAVING TIE-BACK WITH LOCAL JURISDICTION PRIOR TO BID
7. EXISTING PROPANE TANK AND BURIED PROPANE LINE TO REMAIN
8. EXISTING BOLLARDS TO REMAIN
9. EXISTING BOLLARD TO BE REMOVED
10. EXISTING FENCE TO REMAIN
11. EXISTING CONCRETE SLAB ON GRADE, FOOTING AND FOUNDATION, TRENCH DRAINS AND UTILITIES TO BE REMOVED
12. EXISTING FIRE HYDRANT TO REMAIN
13. EXISTING BUILDING TO REMAIN
14. EXISTING TOWER TO REMAIN
15. EXISTING FLAGPOLE AND BASE TO BE REMOVED
16. EXISTING CONCRETE RAMP, FOUNDATION WALLS AND FOOTINGS AND STEEL GUARD RAIL TO BE REMOVED
17. EXISTING FENCE TO BE REMOVED
18. EXISTING FENCE AND GATES TO REMAIN
19. EXISTING ELECTRICAL VAULT TO BE REMOVED
20. EXISTING SAND AND OIL SEPERATOR TO BE REMOVED
21. EXISTING BURIED CONDUITS BETWEEN EXISTING DRIVER LICENSE BUILDING AND EXISTING RADIO TOWER BUILDING TO REMAIN UNTIL PHASE TWO. LOCATION SHOWN ON PLAN IS APPROXIMATE - FIELD VERIFY EXACT LOCATION PRIOR TO BID.
22. EXISTING MECHANICAL AND ELECTRICAL EQUIPMENT SERVING EXISTING DRIVER LICENSE BUILDING TO BE REMOVED. EXISTING FENCE AROUND EQUIPMENT TO BE REMOVED. EXISTING CANOPY TO BE REMOVED.
23. EXISTING BUILDING TO BE REMOVED IN ITS ENTIRETY INCLUDING ALL UTILITIES, BASEMENT AND ALL OTHER BUILDING COMPONENTS. FIELD VERIFY SCOPE OF DEMOLITION PRIOR TO BID. SEE PHASING NOTES THIS SHEET.
24. DASHED LINE INDICATES APPROXIMATE LOCATION OF EXISTING PROPANE LINE TO REMAIN. VERIFY EXACT LOCATION PRIOR TO COMMENCEMENT OF WORK
25. PAINT OVER ALL EXISTING PAVEMENT MARKINGS WITH BLACK PAVEMENT MARKING PAINT. EXISTING PAVEMENT MARKINGS NOT SHOWN. FIELD VERIFY EXISTING PAVEMENT MARKINGS PRIOR TO BID
26. EXISTING LANDSCAPING/LAWN TO BE REMOVED. EXISTING SPRINKLER SYSTEM TO BE REMOVED
27. EXISTING COBBLE TO BE REMOVED
28. EXISTING CONC. CURB TO REMAIN
29. EXISTING TREES TO BE REMOVED
30. EXISTING SEWER MANHOLE TO BE REMOVED. FIELD VERIFY EXACT LOCATION
31. EXISTING SEWER LINE TO BE REMOVED OR ABANDONED IN PLACE AT CONTRACTOR'S OPTION. FIELD VERIFY EXACT LOCATION
32. EXISTING SEWER LINE TO REMAIN; CAP. FIELD VERIFY EXACT LOCATION
33. EXISTING WATER LINE TO REMAIN. FIELD VERIFY EXACT LOCATION
34. EXISTING CANOPY AND CONCRETE SLAB TO BE REMOVED. EXISTING MECHANICAL/ELECTRICAL EQUIPMENT TO BE REMOVED
35. EXISTING ELEC. EQUIPMENT TO BE REMOVED

GENERAL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING LANDSCAPING AND SITE IMPROVEMENTS INDICATED TO REMAIN, WHICH ARE TO REMAIN FREE FROM DAMAGE DURING CONSTRUCTION BOTH INSIDE AND OUTSIDE THE CONRACT LIMIT LINE. CONTRACTOR SHALL REPAIR OR REPLACE ANY DAMAGED ITEM OR SITE IMPROVEMENTS AS SPECIFIED, OR IF NOT SPECIFIED, TO MATCH EXISTING ADJACENT CONSTRUCTION.
2. CONTRACTOR SHALL VERIFY EXACT LOCATION OF ALL UTILITIES AND SITE IMPROVEMENTS WHICH ARE AFFECTED BY, OR WHICH TIE-IN WITH NEW CONSTRUCTION.
3. PROVIDE TEMPORARY 6'-0" (MIN.) HIGH CHAINLINK FENCE AT PROJECT LIMIT LINE, COMPLETE WITH GATES AS REQUIRED, UNLESS NOTED OTHERWISE.
4. EXISTING ROAD, PARKING, SERVICE DRIVES, AND SIDEWALKS SHALL REMAIN ACCESSIBLE AND BE KEPT CLEAR OF CONSTRUCTION EQUIPMENT MATERIALS, MUD, DIRT, AND OTHER DEBRIS.
5. SEE CIVIL AND LANDSCAPE DRAWINGS FOR EXTENT OF SITE WORK.
6. CONTRACT LIMIT LINE DOES NOT PERTAIN TO SITE UTILITIES.
7. ALL CONCRETE PAVING, FOUNDATION WALLS, FOOTINGS, SLABS ON GRADE, RETAINING WALLS AND CURB AND GUTTER WITHIN CONTRACT LIMIT LINE TO BE REMOVED, UNLESS NOTED OTHERWISE.
8. ALL ASPHALT PAVING WITHIN CONTRACT LIMIT LINE TO BE REMOVED, UNLESS NOTED OTHERWISE.
9. ALL EXISTING PLANTS WITHIN CONTRACT LIMIT LINE TO BE REMOVED, UNLESS NOTED OTHERWISE.
10. ALL EXISTING FENCES, FENCE POSTS AND FENCE POST BASES WITHIN CONTRACT LIMIT LINE TO BE REMOVED, UNLESS NOTED OTHERWISE.

LEGEND:

EXISTING ASPHALT PAVING TO BE REMOVED

EXISTING ASPHALT PAVING TO REMAIN. PAINT OVER ALL EXISTING PAVEMENT MARKINGS WITH BLACK PAVEMENT MARKING PAINT. EXISTING PAVEMENT MARKINGS NOT SHOWN. FIELD VERIFY EXISTING PAVEMENT MARKINGS PRIOR TO BID

CONSTRUCTION DOCUMENTS

DLD - OGDEN

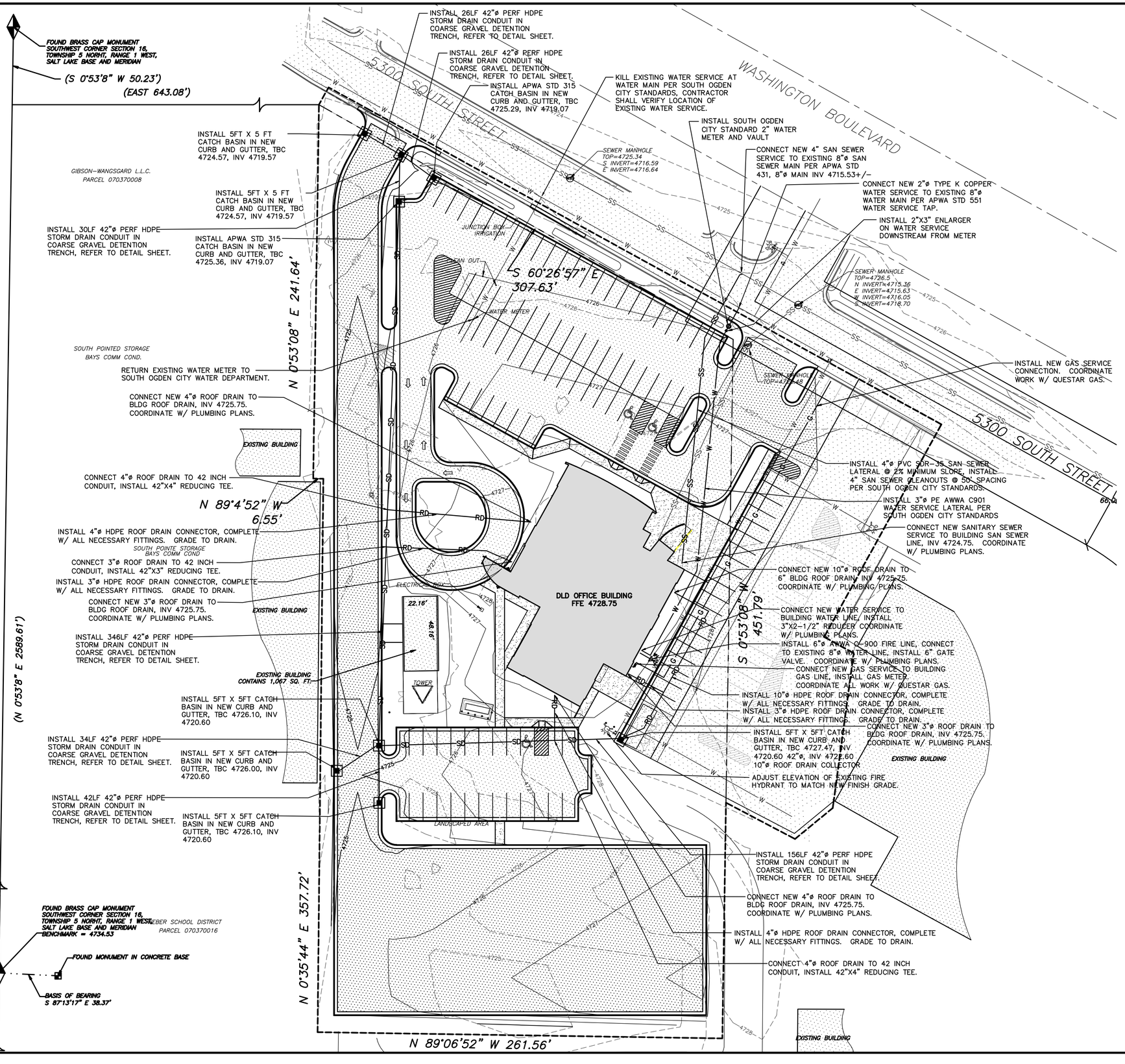
SOUTH OGDEN, UTAH

JRCA
ARCHITECTS
577 South 200 East
Salt Lake City, Utah 84111
(801) 533-2100 fax: 533-2101 jrcadesign.com

DATE/REVISION	PROJECT #.
11-24-2010	10019

SITE DEMOLITION PLAN

DS101



NORTH

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

GENERAL NOTES:

1. NO CHANGE IN DESIGN OF UTILITY LOCATION OR GRADE WILL BE MADE BY THE CONTRACTOR WITHOUT THE WRITTEN APPROVAL OF THE SOUTH OGDEN CITY, OR OTHER AUTHORITY HAVING JURISDICTION OVER THAT UTILITY.

2. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND AVOIDING ALL UTILITIES AND SERVICE LATERALS (WHETHER SHOWN OR NOT SHOWN ON THE PLANS), AND FOR REPAIRING ALL DAMAGE THAT OCCURS TO THE UTILITIES DURING CONSTRUCTION.

3. ALL THRUST BLOCKS SHALL BE POURED IN PLACE AGAINST UNDISTURBED SOIL AS PER THE SPECIFICATIONS. ALL VALVES, FITTINGS AND APPURTENANCES SHALL BE BLOCKED.

4. ALL EXPOSED NUTS AND BOLTS ON WATER LINE FITTINGS SHALL BE COATED WITH A NON_OXIDE WAX AND WRAPPED IN 8_MIL POLYETHYLENE.

5. CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL ACCORDING TO THE GOVERNING AGENTS STANDARDS. CONTRACTOR SHALL WET DOWN ALL DRY MATERIALS AND RUBBISH TO PREVENT BLOWING.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED TO ADJACENT SURFACE IMPROVEMENTS DURING CONSTRUCTION.

7. CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY SETTLEMENT OF OR DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION.

8. ALL EXISTING ASPHALT AND CONCRETE PAVEMENT TO BE CUT SHALL BE SAW CUT IN NEAT STRAIGHT LINES BY THE CONTRACTOR PRIOR TO EXCAVATION.

9. NO SUBSTITUTES IN PIPE DIAMETER DIFFERENT FROM THOSE SHOWN ON THIS PLAN WILL BE PERMITTED UNLESS SUBMITTED TO AND APPROVED BY THE OWNER AND/OR HIS REPRESENTATIVE, AND THE NATIONAL PARK SERVICE.

10. THE BOTTOM OF ALL UTILITY TRENCHES SHALL BE COMPACTED THOROUGHLY PRIOR TO PLACING PIPE. IF ROCK IS ENCOUNTERED AT DESIGN GRADE, OR A SOFT OR SOGGY BOTTOM IS ENCOUNTERED, THE TRENCH BOTTOM SHALL BE OVEREXCAVATED AND SUITABLE MATERIAL PLACED AND COMPACTED TO BOTTOM OF TRENCH GRADE.

11. ALL STORM DRAIN BOXES SHALL SHALL BE SIZED LARGE ENOUGH TO ACCEPT THE STORM DRAIN CONDUIT PROPOSED TO BE CONNECTED. ALL STORM DRAIN CONDUIT CONNECTIONS TO BOXES SHALL BE WATERTIGHT.

12. CONTRACTOR SHALL CALL FOR BLUE STAKES, TELEPHONE 1-800-662-4111, A MINIMUM OF 48 HOURS BEFORE ANY EXCAVATION IS TO COMMENCE.

REGISTERED PROFESSIONAL ENGINEER
GEORGE WILLIAM BUYS
No. 152806
STATE OF UTAH

No.	Date	By	Revision

BUSH & GUDGELL, INC.
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6625 South 300 East, Suite 100
Salt Lake City, Utah 84107
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www.bushandgudgell.com

Drawn : GWB Date : 11/24/2010
Designer : GWB
Checked : GWB
Approved :
Scale : 1 INCH = 30 FEET
Job No : 102103

DLD SOUTH OGDEN, 615 EAST 5300 SOUTH
UTILITY PLAN
LOCATION: SEC 16, T5N, R1W, S.L.B.&M.
PREPARED FOR: JRCA ARCHITECTS

SHEET
C-1
SHEETS
FILE: 102103

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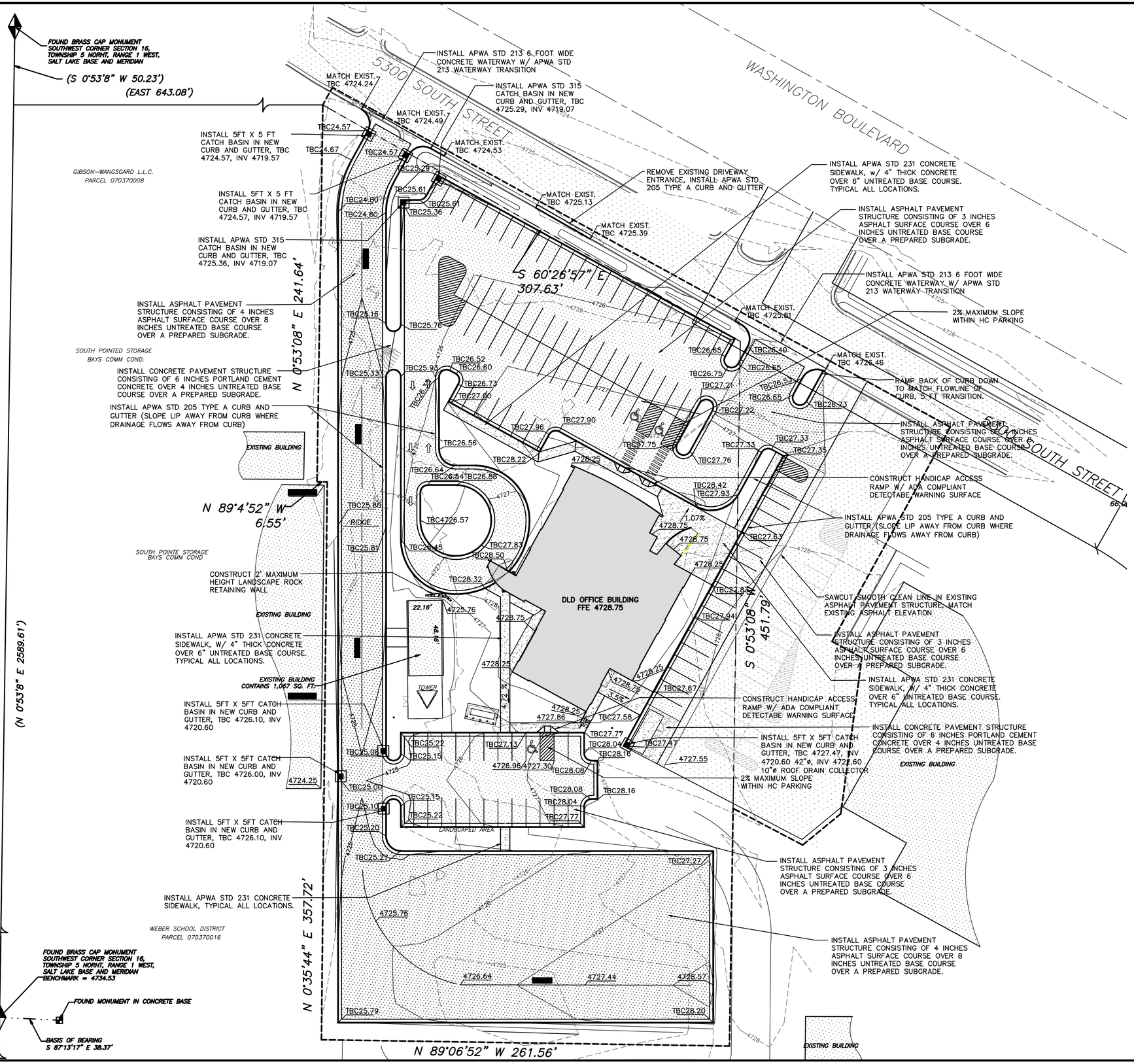

NORTH

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

GENERAL NOTES:

1. CONTRACTOR SHALL HAVE OBTAINED AND REVIEWED THE GEOTECHNICAL INVESTIGATION, PREPARED BY PROFESSIONAL SERVICE INDUSTRIES DATED SEPTEMBER 22, 2010, AND SHALL BE FAMILIAR WITH THE RECOMMENDATIONS MADE IN THAT REPORT.

2. STRIP AND REMOVE EXISTING VEGETATION, ORGANIC TOPSOILS, DEBRIS, FILL, EXISTING FOUNDATIONS, PAVEMENT STRUCTURE, AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AND PAVEMENT AREAS. UNSUITABLE MATERIALS SHALL BE REMOVED FROM BENEATH THE PROPOSED CONSTRUCTION. AFTER THE SITE HAS BEEN CLEARED AND STRIPPED, THE SUBGRADE SOILS IN AREAS TO RECEIVE FILL AND/OR STRUCTURES OR PAVEMENTS SHOULD BE SCARIFIED MOISTURE CONDITIONAD AND COMPACTED TO A MINIMUM OF 90 PERCENT BASED UPON ASTM DESIGNATION D-1557.

3. ON-SITE GRANULAR SOILS ARE GENERALLY SUITABLE FOR REUSE AS STRUCTURAL FILL, SITE GRADING FILL AND UTILITY TRENCH BACKFILL. IMPORTED FILL MATERIAL SHALL CONSIST OF WELL-GRADED SAND AND GRAVEL MATERIALS THAT ARE FREE OF ORGANIC OR OTHER DELETERIOUS MATERIALS. IMPORTED FILL MATERIAL SHALL BE A NON-EXPANSIVE, GRANULAR SOIL WITH A PLASTICITY INDEX LESS THAN 15, AND SHALL MATCH THE GRADATION IDENTIFIED IN THE GEOTECHNICAL INVESTIGATION. STRUCTURAL FILL SHALL BE FREE OF FROZEN MATERIALS, SOD, OR ANY OTHER DELETERIOUS MATERIALS. REFER TO SPECIFICATIONS.

4. PLACE AND COMPACT FILL MATERIALS IN HORIZONTAL LIFTS NOT EXCEEDING 6 TO 8 INCHES IN LOOSE THICKNESS, USING EQUIPMENT AND PROCEDURES THAT WILL PRODUCE RECOMMENDED WATER CONTENTS AND DENSITIES THROUGHOUT THE LIFT. FILL MATERIALS PLACED BENEATH FOUNDATION AREAS SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 1557. FILL MATERIALS PLACED BENEATH PAVEMENTS, FLOOR SLABS OR CONCRETE FLAT WORK AREAS SHALL BE COMPACTED TO AT LEAST 90 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 1557.

5. HEAVY DUTY PAVEMENT STRUCTURAL SECTION SHALL CONSIST OF 1-1/2 INCHES OF ASPHALT SURFACE COURSE OVER 2-1/2 INCH ASPHALTIC BINDER CONCRETE OVER 8 INCHES OF UNTREATED BASE COURSE OVER A PREPARED SUBGRADE. LIGHT DUTY ASPHALT PAVEMENT STRUCTURAL SECTION SHALL CONSIST OF 1-1/2 INCHES OF ASPHALT SURFACE COURSE OVER 1-1/2 INCHES ASPHALT BINDER CONCRETE OVER 6 INCHES OF UNTREATED BASE COURSE OVER A PREPARED SUBGRADE. BASE COURSE GRADATION SHALL MEET THE GRADATION CRITERIA PRESENTED IN THE GEOTECHNICAL INVESTIGATION.

6. NO GRADE CHANGES WILL BE PERMITTED FROM THAT SHOWN AND APPROVED ON THIS PLAN WITHOUT RESUBMITTING THE PROPOSED CHANGES TO THE OWNER, HIS REPRESENTATIVE, AND TO THE SOUTH OGDEN CITY ENGINEERING DEPARTMENT.

GEORGE WILLIAM BUYS No. 152806 REGISTERED PROFESSIONAL ENGINEER STATE OF UTAH

No	Date	By	Revision

BUSH & GUDGELL, INC.
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Drawn : GWB Date : 11/24/2010
Designer : GWB
Checked : GWB
Approved :
Scale : 1 INCH = 30 FEET
Job No : 102103

DLD SOUTH OGDEN, 615 EAST 5300 SOUTH
GRADING PLAN
LOCATION: SEC 16, T5N, R1W, S.L.B.&M.
PREPARED FOR: JRCA ARCHITECTS

SHEET
C-2
SHEETS
FILE: 102103

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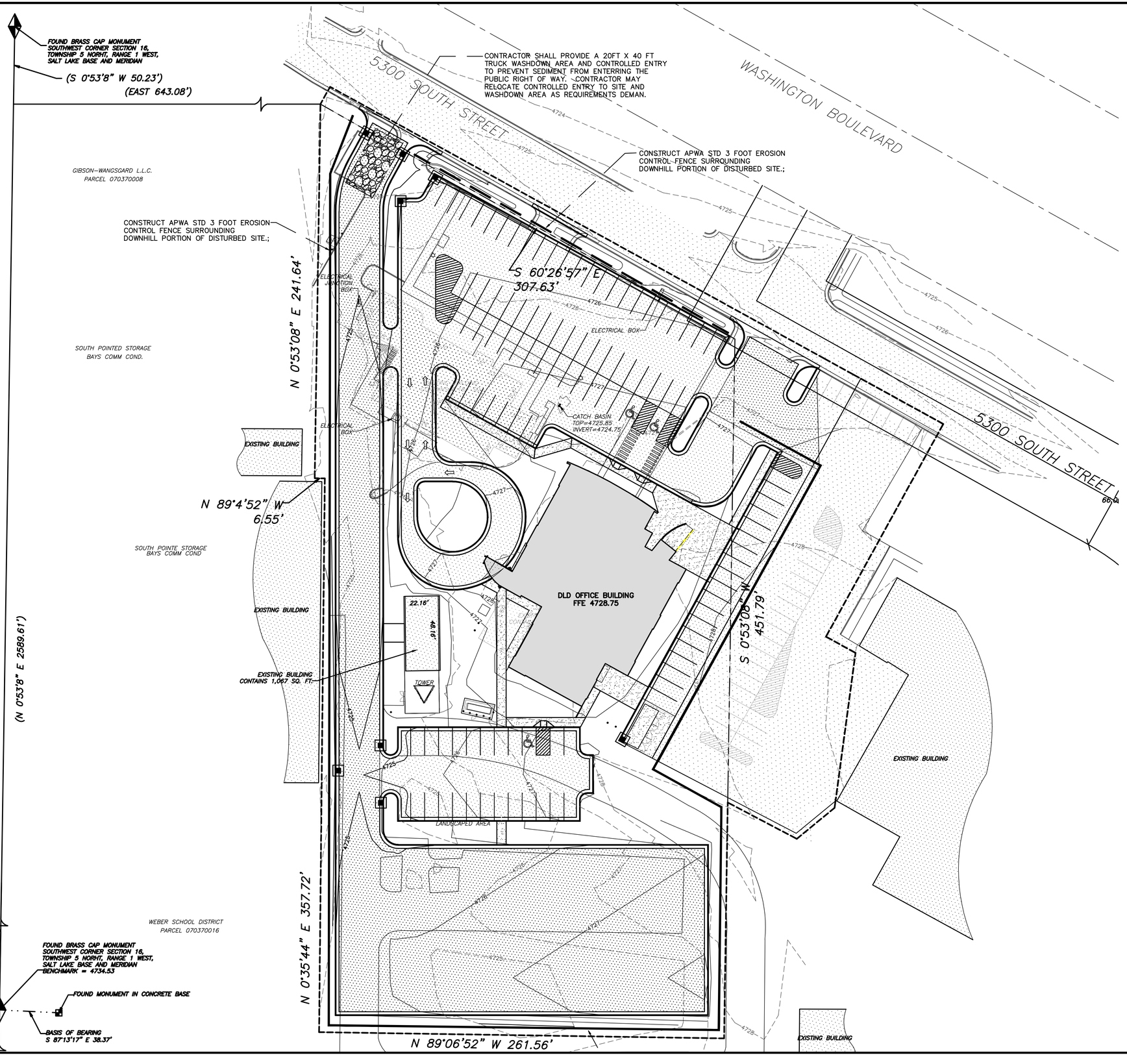

NORTH

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

UPDES INFORMATION:

1. DESCRIPTION OF THE NATURE OF THE CONSRUCTION ACTIVITY: THIS CONSTRUCTION WILL CONSIST OF INSTALLATION OF UTILITIES, ROADWAYS, AND GRADING FOR THE DEVELOPMENT OF A NEW STATE OF UTAH, DEPARTMENT OF MOTOR VEHICLE, OFFICE LOCATED ON 3.20 ACRES OF LAND LOCATED AT 636 EAST 5300 SOUTH IN SOUTH OGDEN.

2. DESCRIPTION OF THE INTENDED SEQUENCE OF MAJOR ACTIVITIES WHICH DISTURB SOILS FOR MAJOR PORTIONS OF THE SITE: THE SEQUENCE OF ACTIVITIES WILL BE:
   A. DEMOLITION OF EXISTING STRUCTURE AND IMPROVEMENTS
   B. GRUBBING OF SITE
   C. EXCAVATION
   D. GRADING
   E. INSTALLATION OF UTILITIES
   F. INSTALLATION OF ROADWAY IMPROVEMENTS

3. ESTIMATE OF THE TOTAL AREA OF THE SITE AND THE TOTAL AREA OF THE SITE THAT IS EXPECTED TO BE DISTURBED BY EXCAVATION, GRADING, OR OTHER ACTIVITIES:
   TOTAL AREA = 3.2 ACRES
   AREA OF SITE TO BE DISTURBED = 3.2 ACRES

4. ESTIMATE OF RUNOFF COEFFICIENT OF THE SITE AFTER CONSTRUCTION ACTIVITIES ARE COMPLETE, AND THE EXISTING DATA DESCRIBING THE SOIL. THE SITE WILL BE DEVELOPED INSTALLING NEW ASPHALT PARKING AREA AND BUILDING AREA. STORM WATER FROM THE SITE IS TO BE RETAINED ON-SITE AND NO STORM WATER RUNOFF WILL BE ALLOWED TO ENTER THE PUBLIC RIGHT OF WAY.

GENERAL EROSION CONTROL NOTES:

1. AT ALL TIMES DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING AND CONTROLLING EROSION DUE TO WIND AND RUNOFF. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR MAINTAINING THE EROSION CONTROL FACILITIES SHOWN.

2. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DUE TO UNFORESEEN PROBLEMS OR IF THE PLAN DOES NOT FUNCTION AS INTENDED. ADDITIONAL CONTROL DEVISES MAY BE REQUIRED UPON INSPECTION OF PROPOSED FACILITIES.

3. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE STREETS CLEAN AND FREE FROM DEBRIS FROM TRAFFIC FROM THE SITE.

4. ALL STORM DRAIN FACILITIES ON SITE AND ADJACENT TO THE SITE NEED TO BE PROTECTED FROM SITE RUNOFF. INLET PROTECTION DEVICES SHALL BE INSTALLED IMMEDIATELY UPON INDIVIDUAL INLETS BECOMING FUNCTIONAL.

5. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE PAVED, SEEDED WITH NATIVE VEGETATION, OR LANDSCAPED. REFER TO LANDSCAPE PLANS FOR SEED MIX AND PLANTING SPECIFICATIONS.

6. EROSION CONTROL STRUCTURES BELOW SODDED AREAS MAY BE REMOVED ONCE SOD AND FINAL LANDSCAPING ARE IN PLACE. EROSION CONTROL STRUCTURES BELOW SEEDED AREAS MUST REMAIN IN PLACE UNTIL THE ENTIRE AREA HAS ESTABLISHED A MATURE COVERING OF HEALTHY VEGETATION. EROSION CONTROL IN PROPOSED PAVEMENT AREAS SHALL REMAIN IN PLACE UNTIL PAVEMENT IS COMPLETE.

7. CONTRACTOR SHALL USE VEHICLE TRACKING CONTROL AT ALL LOCATIONS WHERE VEHICLES WILL ENTER OR EXIT THE SITE. CONTROL FACILITIES WILL BE MAINTAINED WHILE CONSTRUCTION IS IN PROGRESS, MOVED WHEN NECESSARY AND REMOVED WHEN THE SITE IS PAVED.

8. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, ETC.) SHALL BE DISPOSED OF IN A MANNER THAT PREVENTS CONTACT WITH STORM WATER DISCHARGES FROM THE SITE.

9. BLOWING DUST MUST BE CONTROLLED AT ALL TIMES. INSTALLATION OF A SILT SCREEN AND SITE WATERING SHALL BE USED TO CONTROL DUST. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS ABSOLUTELY PROHIBITED.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, STRAW BALES, ETC.) DUE TO GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT.

11. ALL OFF-SITE CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF BITUMINOUS PAVING FOR ROAD CONSTRUCTION.

12. ALL MEASURES CONTAINED IN THIS PLAN SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A RAINFALL EVENT. ANY NEEDED CLEANING AND REPAIRS NEED TO BE DONE IMMEDIATELY UPON DISCOVERY. ALL UTILITY LINES SHALL BE CLEANED OF DIRT AND DEBRIS PRIOR TO BEING PUT INTO SERVICE DOWN-GRADE LINES MUST BE PROTECTED FROM WASH-WATER DURING THE CLEANING TO AVOID CONTAMINATION AND COMPROMISING OUTFALL CLEANLINESS.

REGISTERED PROFESSIONAL ENGINEER
GEORGE WILLIAM BUYS
No. 152806
STATE OF UTAH

No.	Date	By	Revision

BUSH & GUDGELL, INC.
Engineers • Planners • Surveyors
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Salt Lake City, Utah 84107
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www.bushandgudgell.com

Drawn : GWB Date : 11/24/2010
Designer : GWB
Checked : GWB
Approved :
Scale : 1 INCH = 30 FEET
Job No : 102103

DLD SOUTH OGDEN, 615 EAST 5300 SOUTH
STORM WATER POLLUTION PREVENTION PLAN
LOCATION: SEC 16, T5N, R1W, S.L.B.&M.
PREPARED FOR: JRCA ARCHITECTS

SHEET
C-3
SHEETS
FILE: 102103

Z:\BG\102000-102999\102100-102199\102103 JRCA DLD SO OGDEN\102103 BASE.dwg

Concrete sidewalk

1. UNTREATED BASE COURSE: Provide material specified in APWA Section 32 11 23.
   A. Do not use gravel as a substitute for untreated base course without ENGINEER's permission.
   B. Place material per APWA Section 32 05 10.
   C. Compact per APWA Section 31 23 26 to a modified proctor density of 95 percent or greater. Maximum lift thickness before compaction is 8 inches when using riding compaction equipment or 6 inches when using hand held compaction equipment.

2. CONCRETE: Class 4000 per APWA Section 03 30 04.
   A. If necessary, provide concrete that achieves design strength in less than 7 days. Caution; concrete crazing (spider cracks) may develop if air temperature exceeds 90 degrees F.
   B. Place concrete per APWA Section 03 30 10.
   C. Provide 1/2 inch radius on concrete edges exposed to public view
   D. Cure concrete per APWA Section 03 39 00 with type ID Class A or B (clear with fugitive dye) membrane forming compound unless specified otherwise.

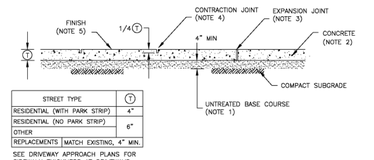
3. EXPANSION JOINT: Make expansion joints vertical, full depth, 1/2 inch wide with type F1 joint filler material per APWA Section 32 13 73.
   A. Set top of filler flush with surface of concrete.
   B. Expansion joints are not required in slip formwork except at the start or end of the installation activity.

4. CONTRACTION JOINT: Make contraction joints vertical.
   A. 1/8 inch wide and 1 inch deep or 1/4 slab thickness if slab is greater than 4 inches thick.
   B. Maximum length to width ratio for non-square panels is 1.5 to 1.

5. FINISH: Broomed.

50

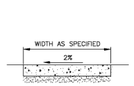
PLAN



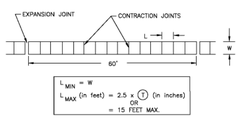
STREET TYPE	①
RESIDENTIAL (WITH PARK STRIP)	4"
RESIDENTIAL (NO PARK STRIP)	6"
OTHER	
REPLACEMENTS	MATCH EXISTING, 4" MIN.

SEE DRIVEWAY APPROACH PLANS FOR SIDEWALK THICKNESS AT DRIVEWAYS

SECTION A–A



SECTION B–B



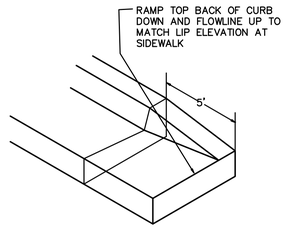
SIDEWALK JOINT DETAIL

Concrete sidewalk

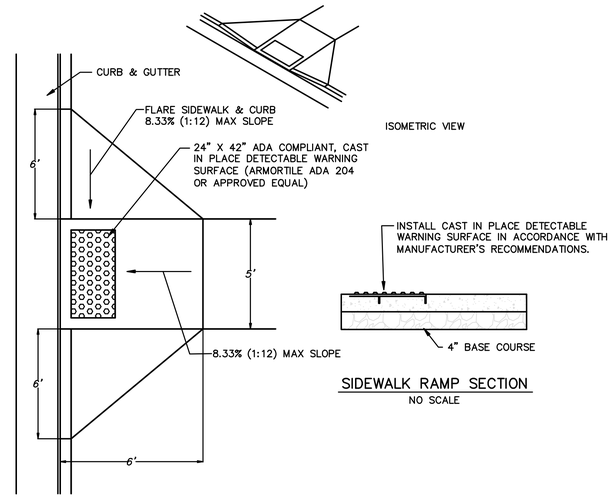
Plan No. **231**

December 2005 51

APWA STD 231 CONCRETE SIDEWALK
NO SCALE

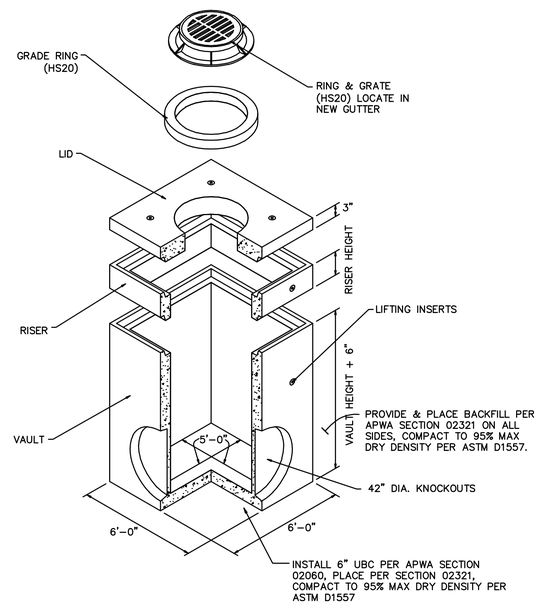


CURB & GUTTER END TRANSITION
NO SCALE

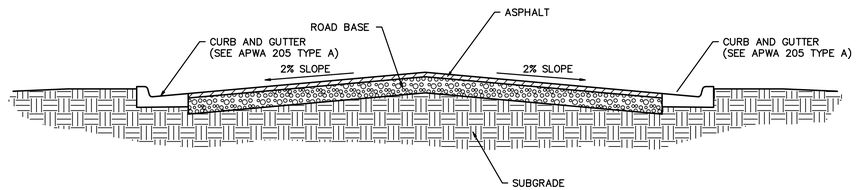


SIDEWALK RAMP SECTION
NO SCALE

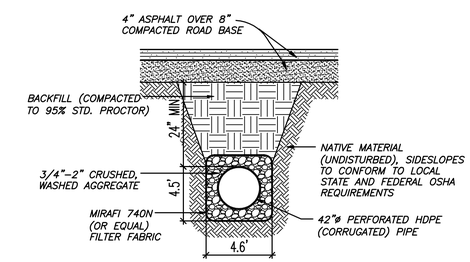
HANDICAP ACCESS SIDEWALK RAMP
NO SCALE



5FT X 5 FT STORM DRAIN BOX
NO SCALE



ROAD SECTION
NO SCALE



DETENTION TRENCH
NO SCALE

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www.bushandgudgell.com

No.	Date	By	Revision

Drawn : GWB Date : 11/24/2010
Designer : GWB
Checked : GWB
Approved :
Scale : NO SCALE
Job No : 102103

DLD SOUTH OGDEN, 615 EAST 5300 SOUTH
DETAIL SHEET
LOCATION: SEC 16, T5N, R1W, S.L.B.&M.
PREPARED FOR: JRCA ARCHITECTS

SHEET **C-4**

SHEETS
FILE: 102103

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Silt fence

1. DESCRIPTION: A temporary sediment barrier consisting of a filter fabric stretched across and attached to supporting posts and entrenched.

2. APPLICATION: To intercept sediment from disturbed areas of limited extent.
   A. Perimeter Control: Place barrier at down gradient limits of disturbance.
   B. Sediment Barrier: Place barrier at toe of slope or soil stockpile.
   C. Protection of Existing Waterways: Place barrier at top of stream bank.
   D. Inlet Protection.

3. INSTALLATION/APPLICATION CRITERIA: Refer to APWA Section 01 57 00.
   A. Synthetic filter fabric shall be a pervious sheet of propylene, nylon, polyester, or polyethylene yarn. Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of 6 months of expected usable construction life at a temperature range of 0 deg. F. to 120 deg, F.
   B. Burlap shall be 10 ounces per square yard of fabric.
   C. Posts for silt fences shall be either 2" x 4" diameter wood, or 1.33 pounds per linear foot steel with a minimum length of 5 feet. Steel posts shall have projections for fastening wire to them.
   D. The fabric is cut on site to desired width, unrolled, and draped over the barrier. The fabric toe is secured with rocks or dirt. The fabric is secured to the mesh with twin, staples or similar devices.
   E. When attaching two silt fences together, place the end post of the second fence inside the end post of the first fence. Rotate both posts at least 180 degrees on a clockwise direction to create a tight seal with the filter fabric. Drive both posts into the ground and bury the flap.
   F. When used to control sediments from a steep slope, silt fences should be placed away from the toe of the slope for increased holding capacity.

4. MAINTENANCE:
   A. Inspected immediately after each rainfall and at least daily during prolonged rainfall.
   B. Should the fabric on a silt fence or filter barrier decompose or become ineffective before the end of the expected usable life and the barrier still be necessary, the fabric shall be replaced promptly.
   C. Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately one-half the height of the barrier.
   D. Re-anchor fence as necessary to prevent shortcutting.
   E. Inspect for runoff bypassing ends of barriers or undercutting barriers.

6

Stabilized roadway entrance

1. DESCRIPTION: A temporary stabilized pad of gravel for controlling equipment and construction vehicle access to the site.

2. APPLICATION: At any site where vehicles and equipment enter the public right of way.

3. INSTALLATION/APPLICATION CRITERIA: Refer to APWA Section 01 57 00.
   A. Clear and grub area and grade to provide maximum slope of 1 percent away from paved roadway.
   B. Compact subgrade.
   C. Place filter fabric under stone if desired (recommended for entrance area that remains more than 3 months).

4. MAINTENANCE:
   A. Requires periodic top dressing with additional stones.
   B. Prevent tracking or flow of mud into the public right-of-way.
   C. Periodic top dressing with 2 inches stone may be required, as conditions demand, and repair any structures used to trap sediments.
   D. Inspect daily for loss of gravel or sediment buildup.
   E. Inspect adjacent areas for sediment deposit and install additional controls as necessary.
   F. Expand stabilized area as required to accommodate activities.

18

Curb and gutter

1. UNTREATED BASE COURSE: Provide material specified in APWA Section 32 11 23.
   A. Do not use gravel as a substitute for untreated base course without ENGINEER's permission.
   B. If flow line grade is greater than 0.5 percent (s=0.005), provide 6 inches uncompacted thickness. If less, provide 8 inches uncompacted thickness.
   C. Place material per APWA Section 32 05 10.
   D. Compact per APWA Section 31 23 26 to a modified proctor density of 95 percent or greater. Maximum lift thickness before compaction is 8 inches when using riding compaction equipment or 6 inches when using hand held compaction equipment.

2. CONCRETE: Class 4000 per APWA Section 03 30 04.
   A. If necessary, provide concrete that achieves design strength in less than 7 days. Caution; concrete crazing (spider cracks) may develop if air temperature exceeds 90 degrees F.
   B. Place concrete per APWA Section 03 30 10.
   C. Provide 1/2 inch radius on concrete edges exposed to public view.
   D. Cure concrete per APWA Section 03 39 00 with type ID Class A or B (clear with fugitive dye) membrane forming compound unless specified otherwise.

3. EXPANSION JOINT: Make expansion joints vertical, full depth, 1/2 inch wide with type F1 joint filler material per APWA Section 32 13 73.
   A. Set top of filler flush with surface of concrete.
   B. Expansion joints are required at the start or end of a street intersection curb return.
   C. Expansion joints are not required in slip form work.

4. CONTRACTION JOINT: Make contraction joints vertical.
   A. 1/8 inch wide and 2 inch deep or 1/4 slab thickness if slab is greater than 8 inches thick.
   B. If necessary, match location of contraction joints in portland cement concrete roadway pavements.

5. REINFORCEMENT: ASTM A 615, grade 60, galvanized or epoxy coated deformed steel. See APWA Section 03 20 00 requirements.

6. FINISH: Broomed.

7. PROTECTION AND REPAIR:
   A. Fill flow-line with water. Repair construction that does not drain.
   B. Protect concrete from deicing chemicals during cure.

24

Waterway

1. UNTREATED BASE COURSE: Provide material specified in APWA Section 32 11 23.
   A. Do not use gravel as a substitute for untreated base course without ENGINEER's permission.
   B. Place material per APWA Section 32 05 10.
   C. Compact per APWA Section 31 23 26 to a modified proctor density of 95 percent or greater. Maximum lift thickness before compaction is 8 inches when using riding compaction equipment or 6 inches when using hand held compaction equipment.

2. CONCRETE: Class 4000 per APWA Section 03 30 04.
   A. If necessary, provide concrete that achieves design strength in less than 7 days. Use caution; however, as concrete crazing (spider cracks) may develop if air temperature exceeds 90 degrees F.
   B. Place concrete per APWA Section 03 30 10.
   C. Provide 1/2 inch radius on concrete edges exposed to public view.
   D. Cure concrete per APWA Section 03 39 00 with type ID Class A or B (clear with fugitive dye) membrane forming compound unless specified otherwise.

3. EXPANSION JOINT: Make expansion joints vertical, full depth, 1/2 inch wide with type F1 joint filler material per APWA Section 32 13 73. Set top of filler flush with surface of concrete.

4. CONTRACTION JOINT: Make contraction joints vertical, at least 1/8 inch wide and 2 inches deep or 1/4 slab thickness if slab is greater than 8 inches thick.

5. REINFORCEMENT: ASTM A 615, grade 60, galvanized or epoxy coated deformed steel. See APWA Section 03 20 00 requirements.

6. FINISH: Broomed.

7 PROTECTION AND REPAIR:
   A. Fill flow-line with water. Repair construction that doesn't drain.
   B. Protect concrete from deicing chemicals during cure.

30

Waterway transition structure

1. UNTREATED BASE COURSE: Provide material specified in APWA Section 32 11 23.
   A. Do not use gravel as a substitute for untreated base course without ENGINEER's permission.
   B. Place material per APWA Section 32 05 10.
   C. Compact per APWA Section 31 23 26 to a modified proctor density of 95 percent or greater. Maximum lift thickness before compaction is 8 inches when using riding compaction equipment or 6 inches when using hand held compaction equipment.

2. CONCRETE: Class 4000 per APWA Section 03 30 04.
   A. If necessary, provide concrete that achieves design strength in less than 7 days. Use caution; however, as concrete crazing (spider cracks) may develop if air temperature exceeds 90 degrees F.
   B. Place concrete per APWA Section 03 30 10.
   C. Provide 1/2 inch radius on concrete edges exposed to public view.
   D. Cure concrete per APWA Section 03 39 00 with type ID Class A or B (clear with fugitive dye) membrane forming compound unless specified otherwise.

3. EXPANSION JOINT: Make expansion joints vertical, full depth, 1/2 inch wide with type F1 joint filler material per APWA Section 32 13 73. Set top of filler flush with surface of concrete.

4. CONTRACTION JOINT: Make contraction joints vertical.
   A. 1/8 inch wide and 2 inches deep or 1/4 slab thickness if slab is greater than 8 inches thick.

5. REINFORCEMENT: ASTM A 615, grade 60, galvanized or epoxy coated deformed steel. See APWA Section 03 20 00 requirements.

6. WATERWAY: Use width shown on the Drawings. If not shown then 4 feet for a residential street and 6 feet for a non-residential street.

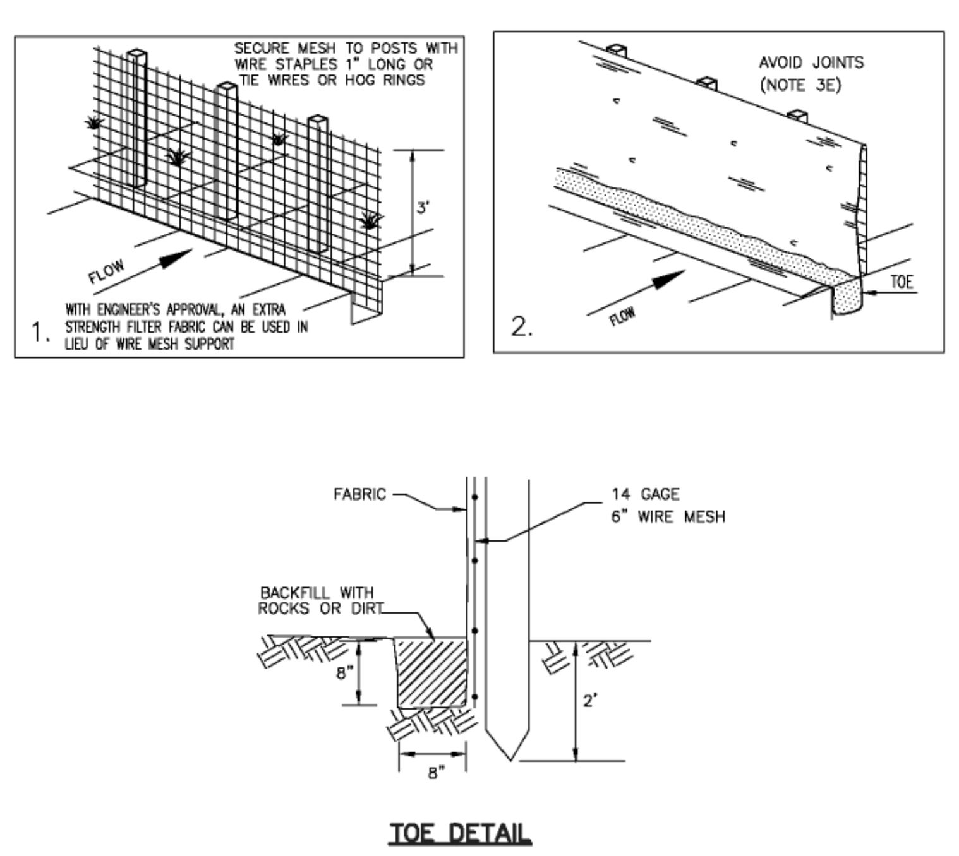
7. FLOW-LINE: A 4 feet wide waterway and a 6 feet wide waterway are shown on Plan No. 213. If a wider waterway is specified or required, offset the flow line in the waterway to match (lines up with) the curb and gutter flow line. Adjust cross slope grades to match existing slopes.

8. FINISH: Broomed.

9. PROTECTION AND REPAIR:
   A. Fill flow-line with water. Repair construction that doesn't drain.
   B. Protect concrete from deicing chemicals during cure.

32

NARRATIVE: THIS PLAN MAY BE USED FOR THE CONSTRUCTION OF A STORM WATER BEST MANAGEMENT PRACTICE (BMP). IT IS NOT INCLUSIVE OF ALL PRACTICES AVAILABLE AND IS ONLY SPECIFIC TO THE CONSTRUCTION OF THIS TYPE. MAINTENANCE OF THIS TYPE OF INSTALLATION IS IMPORTANT AND SHOULD BE CONTINUOUSLY MONITORED BY THE CONTRACTOR AND ENGINEER. DETAILS SHOWN HERE HIGHLIGHT IMPORTANT PARTS OF CONSTRUCTION, AND SHOULD BE MODIFIED AS NEEDED.



Silt fence **122**

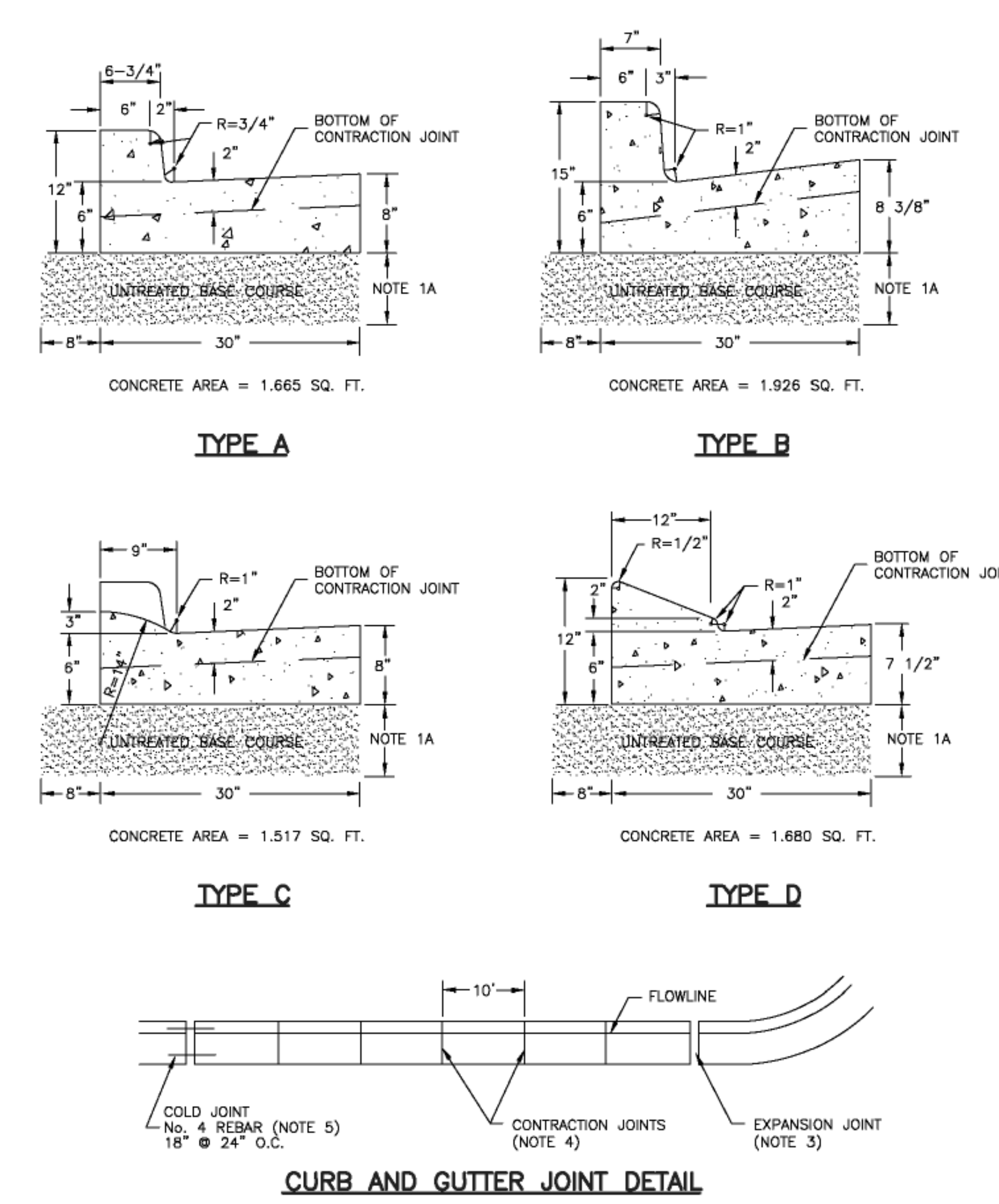
February 2006 7

APWA STD 122 SILT FENCE

NO SCALE

APWA STD 126 STABILIZED ENTRY

NO SCALE

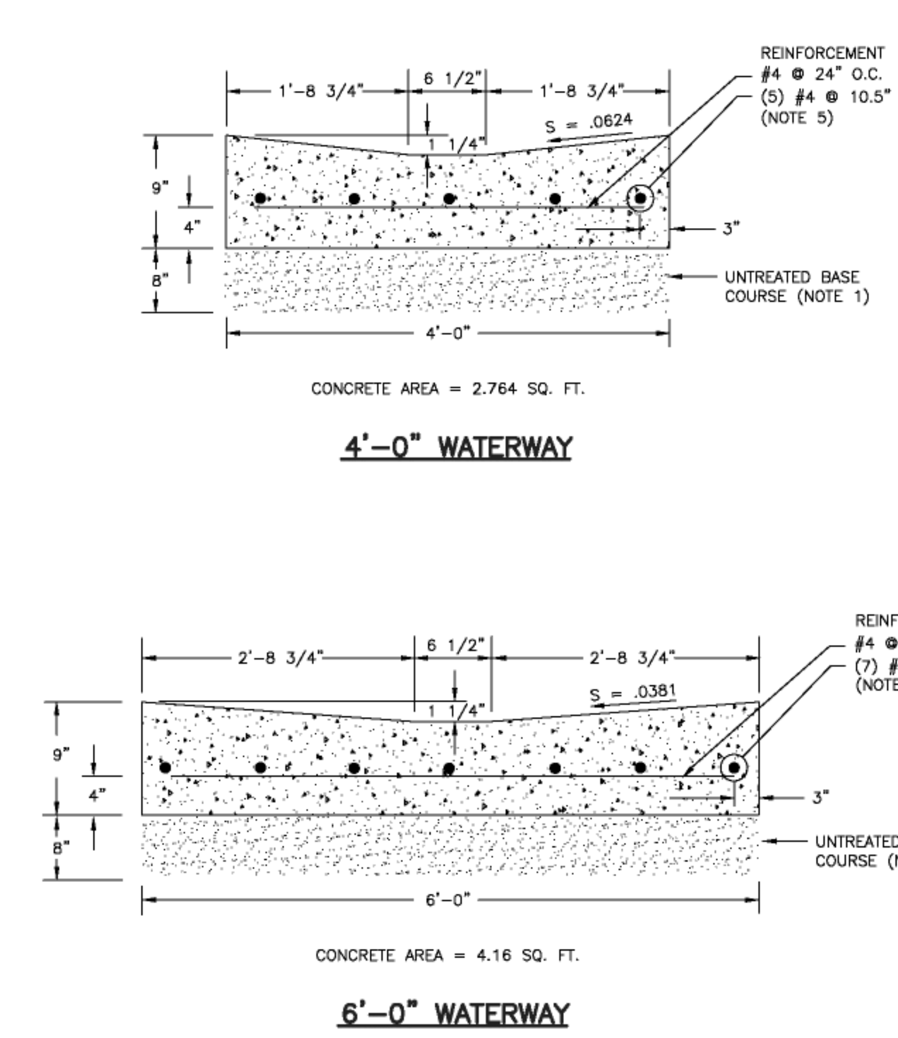


Plan No.
Curb and gutter **205**

June 2005 25 Drawing 1 of 2

APWA STD 205 CURB & GUTTER

NO SCALE

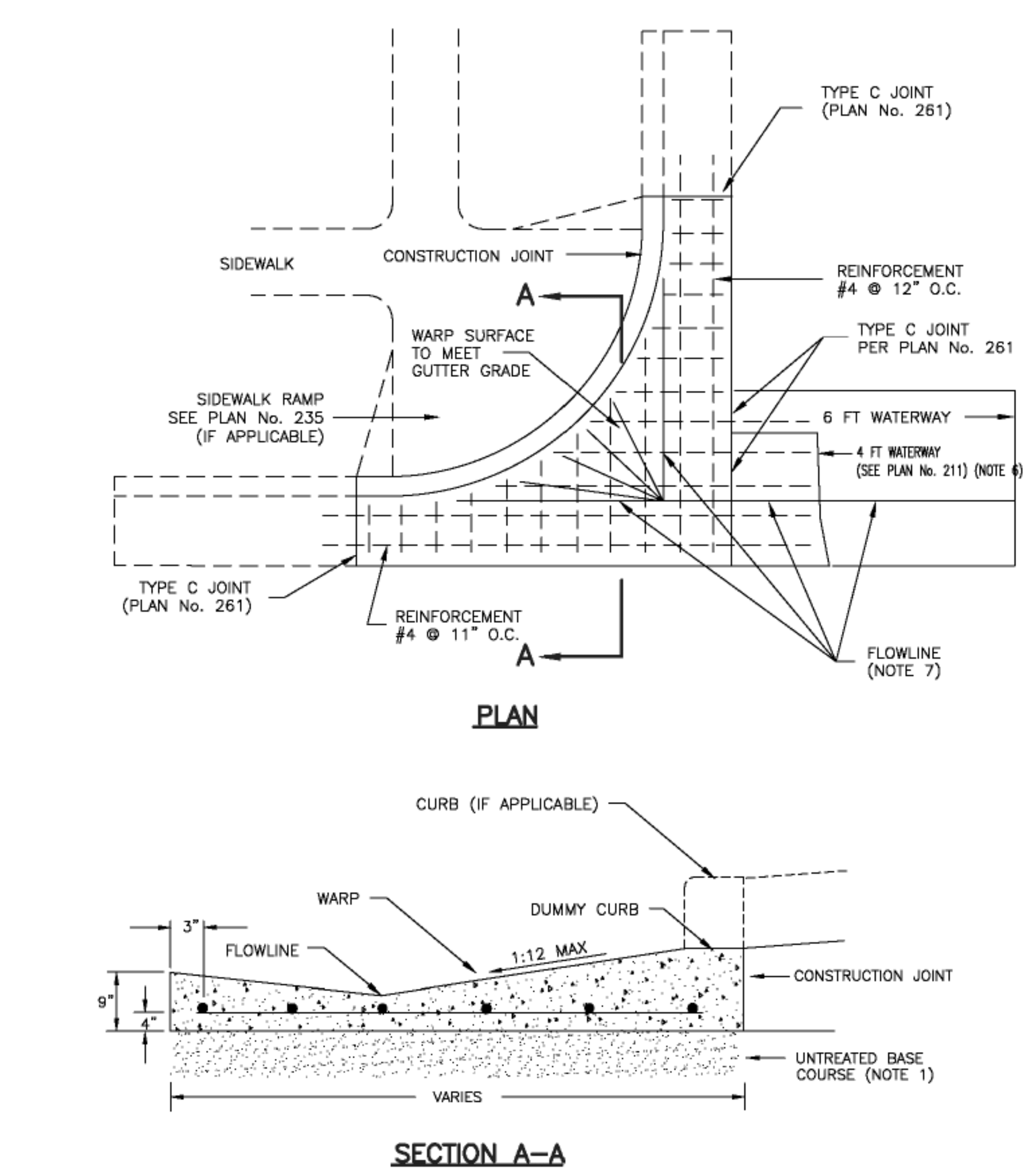


Plan No.
Waterway **211**

January 2003 31

APWA STD 211 WATERWAY

NO SCALE



Plan No.
Waterway transition structure **213**

May 2005 33

APWA STD 213 WATERWAY TRANSITION

NO SCALE

No	Date	By	Revision

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DLD SOUTH OGDEN, 615 EAST 5300 SOUTH
DETAIL SHEET
LOCATION: SEC 16, T5N, R1W, S.L.B.&M.
PREPARED FOR: JRCA ARCHITECTS

SHEET
C-5

SHEETS
FILE: 102103

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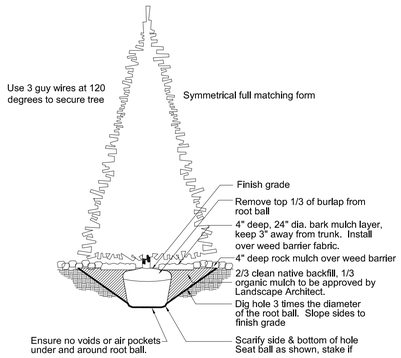
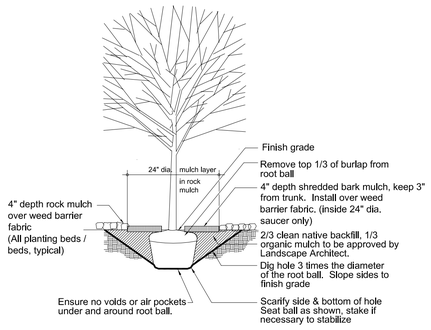
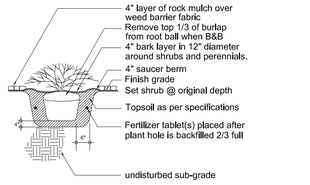


Tree Planting Detail

No scale



Tree Planting Detail



Shrub Planting Detail

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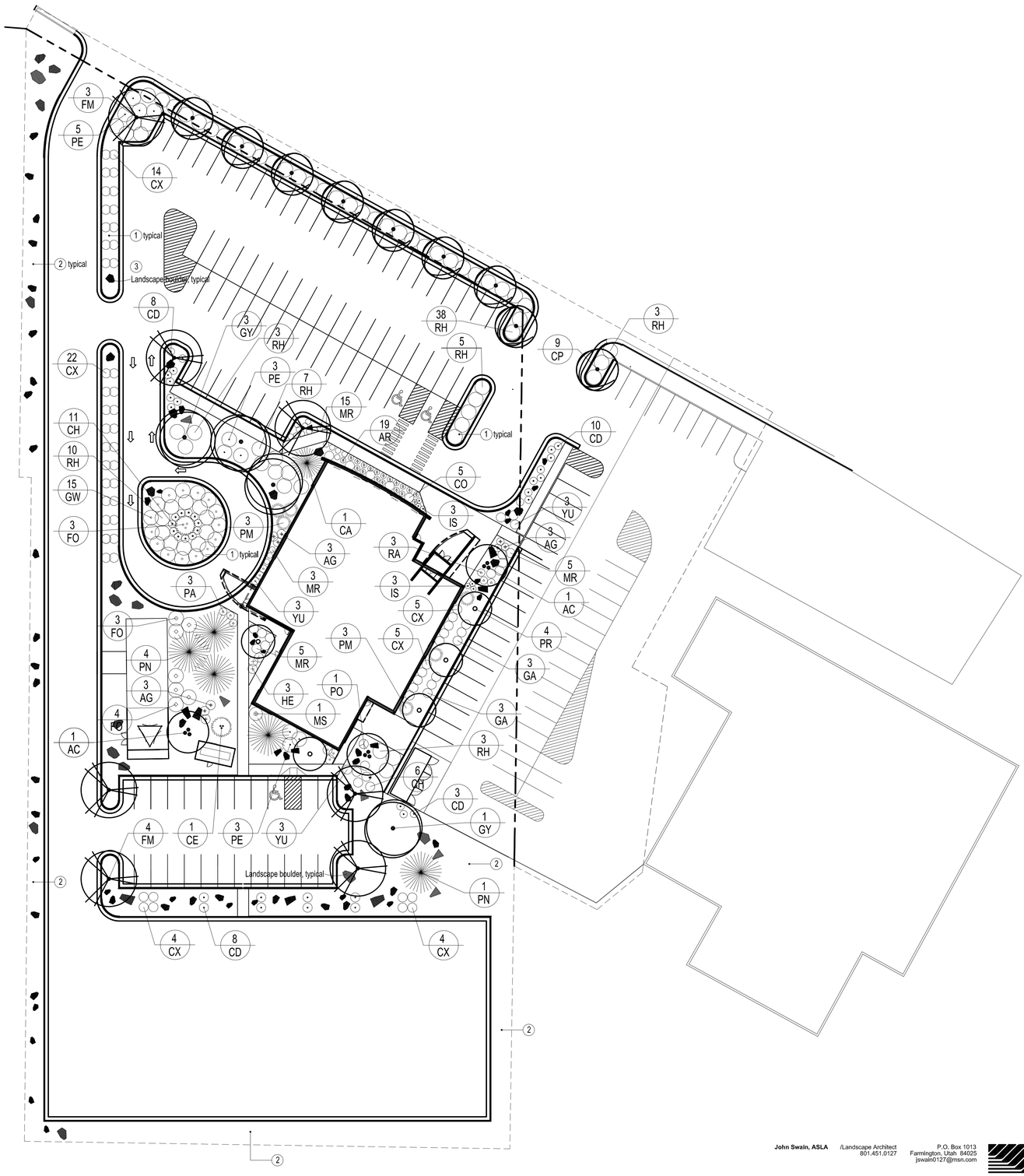

PLANTING PLAN

SCALE 1" = 30'-0"

John Swain, ASLA /Landscape Architect
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P.O. Box 1013
Farmington, Utah 84025
jswain0127@msn.com

NORTH

PLANT MATERIAL LIST

TREES

AC-Acer ginnala 'Red Flame', Clump Amur Maple, 8-10' specimen "multi-stem"
CA-Cedrus atlantica glauca, Blue Atlas Cedar, 8' tall B&B
CP-Crataegus phaenopyrum 'Washington', Washington Hawthorn, 2" cal. B&B
FM-Fraxinus mandshurica 'Mancana', Mancana Ash, 2 " cal. B&B
GY-Gymnocladus dioica, Kentucky Coffee Tree, 2" cal. B&B
PN-Pinus nigra, Austrian Pine, 8' tall B&B
PR-Prunus virginiana 'Canada Red', Canada Red Chokecherry, 2" cal.

SHRUBS

AR-Arctostaphylos uva-ursi 'Massachusetts', Kinnikinnick, 2 gal.
CD-Caryopteris x clandonensis 'Dark Knight', Blue Mist Spirea, 5 gal.
CE-Cercocarpous ledifolius, Curl Leaf Mt. Mahogany, 5 gal.
CH-Chrysothamnus nauseosus ssp., Dwarf Blue Rabbitbrush, 5 gal.
CO-Cornus alba 'Elegantissima', Variegated Dogwood, 5 gal.
(*center between windows on north side of building*)
FO-Forestiera neomexicana, New Mexico Privet, 5 gal.
PO-Potentilla fruiticosa 'Goldfinger', Shrubby Cinquefoil, 2 gal.
PM-Pinus mugo mugus 'Pumilio, Dwarf Mugho Pine, 7 gal.
RA-Ribes alpinum, Alpine Currant, 2 gal.
RH-Rhus aromatica'Grow Low', Grow Low Sumac, 2 gal.

PERENNIALS / GRASSES / GROUND COVERS

AG-Agastache 'Sunset Hyssop', Hyssop, 2 gal.
AR-Arctostaphylos uva-ursi, Bearberry, 2 gal.
CX-Calamagrostis x acutiflora 'Karl Foerster', Feather Grass, 2 gal.
GA-Gaura 'Perky Pink', Wandflower, 1 gal.
GW-Gaura 'Whirling Butterfly', Wandflower, 1 gal.
HE-Hemerocallis "Stella d' Oro', Daylily, 1 gal.
IS-Iris sibirica 'Caesar's Brother, Siberian Iris, 1 gal.
MR-Mahonia repens, Creeping Oregon Grape, 1 gal.
MS-Miscanthus sinensis 'Morning Light', Maiden Grass, 5 gal.
PA-Pennisetum alopecuroides, Fountain Grass, 1 gal.
PE-Perovskia atriplicifolia, Russian Sage, 1 gal.
YU-Yucca filamentosa, Yucca, 2 gal.

NOTES:

1. All planting areas to receive rock mulch layer over weed barrier fabric, 4" depth of 2-3" rock mulch typical.
2. All areas, including those without planting and irrigation, receive rock mulch layer over weed barrier fabric. 4" depth of 2-3" rock mulch, typical.
3. Landscape boulders: approximate size and shape shown on drawings. Place as shown on drawings. Submit source of boulders for approval regarding color and form.

PERMIT DOCUMENTS

DLD - OGDEN

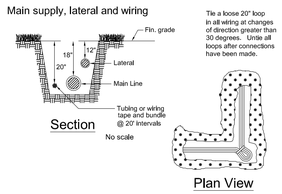
SOUTH OGDEN, UTAH

JRCA
ARCHITECTS
577 South 200 East
Salt Lake City, Utah 84111
(801) 533-2100 fax: 533-2101 jrcadesign.com

DATE/REVISION	PROJECT #.
11-08-2010	10019

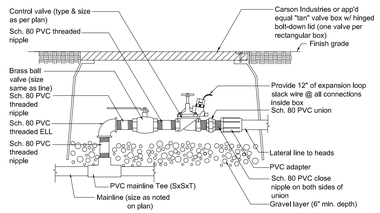
LANDSCAPE PLANTING PLAN

L101



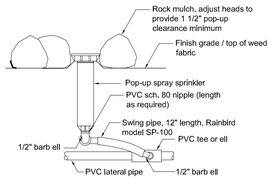
Trenching Detail

No scale



Control Valve Detail

No scale



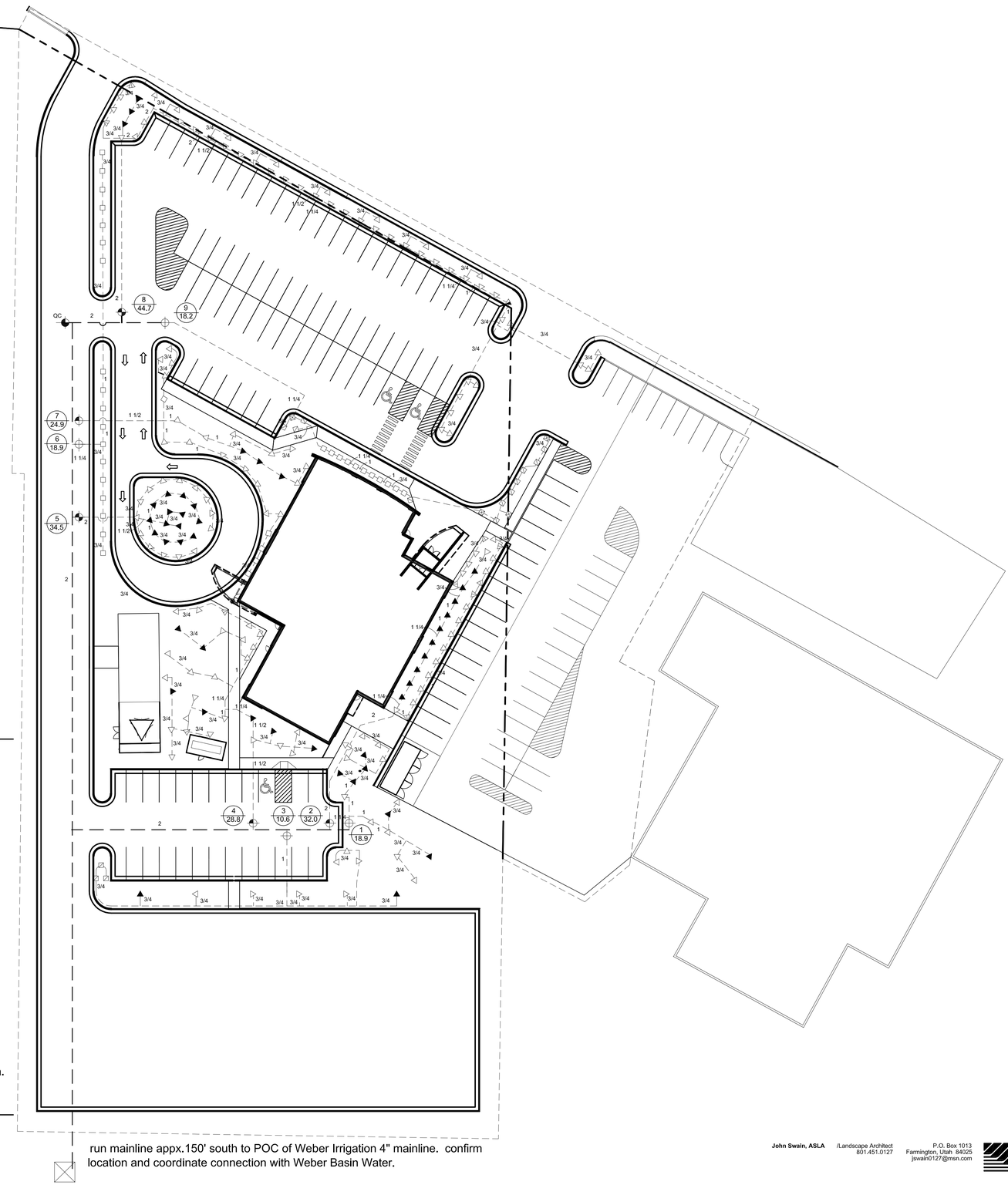
Pop-up Spray Head Detail

No scale

Legend

F TQ H Q

- Rainbird 1804 Pop-up spray head, U10 nozzles (use adjustable nozzles for part circle applications)
- Rainbird 1804 Pop-up spray head, U8 nozzles (use adjustable nozzles for part circle applications)
- Schedule 40 PVC 2" mainline
- Schedule 40 PVC lateral lines, sizes as noted (use Sch. 40 PVC sleeve, min. 2 x line size under all hard surfaces)
- Rainbird GB brass electric control valves: 1", 1 1/4" & 1 1/2. (install in rectangular tan valve boxes)
- Valve number
  Gallons per minute
- QC Rainbird 33-RC quick coupler valve in 10" round tan valve box
- Rainbird RSD-BEx rain sensor, confirm location with Architect
- Main connection: Amiad filter 2" T-S, line size pressure regulator, 2" Mueller stop & waste, and Rainbird 33 RC quick coupler valve in Jumbo 'tan' valve box enclosure and as per manuf. recommendation.
- Rainbird ESP-12 MC exterior wall mount controller. (confirm location with Architect)



John Swain, ASLA /Landscape Architect
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Farmington, Utah 84025
jswain0127@msn.com

NORTH

IRRIGATION PLAN

SCALE 1" = 30'-0"

NOTES:

1-Irrigation main and lateral lines shown schematically for graphic clarity. Locate valves adjacent to hard surfaces where easily accessible. Provide as-built drawings locating all major features of irrigation system.

2-Provide sleeves under all hard surfaces.

3-Verify location of exterior sprinkler controller and rain sensor with Architect.

4-Adjust spray nozzles to prevent overspray on sidewalks and building. Place sprinker heads adjacent to plants as required to insure coverage.

5-Verify point of connection with Weber Basin Water. Coordinate location of POC and mainline with Architect.

6-Use tan valve boxes located in rock mulch areas.

PERMIT DOCUMENTS

DLD - OGDEN

SOUTH OGDEN, UTAH

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ARCHITECTS
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Salt Lake City, Utah 84111
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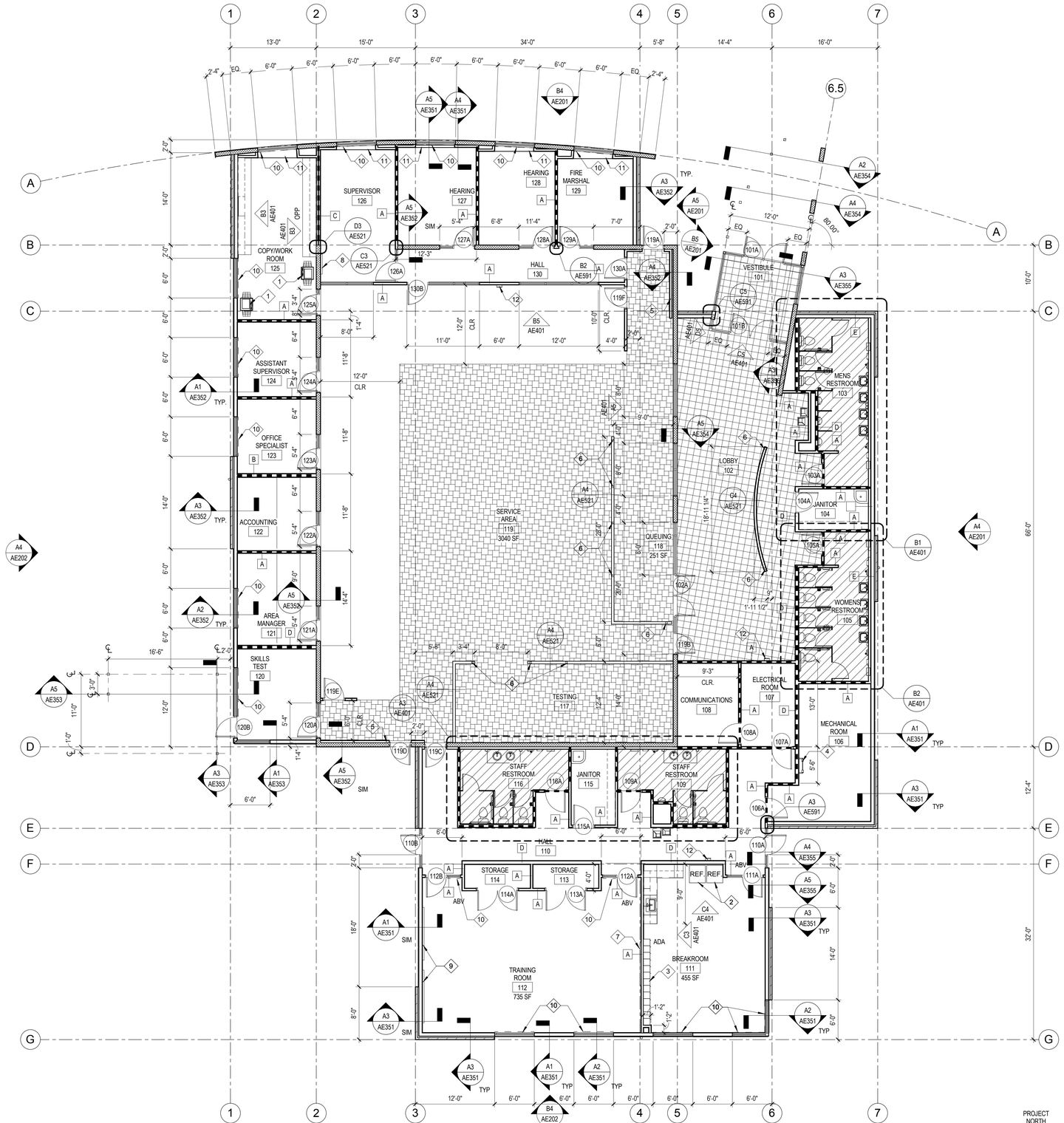
DATE/REVISION	PROJECT #.
11-08-2010	10019

LANDSCAPE IRRIGATION PLAN

L102



FLOOR PLAN
SCALE 1/8" = 1'-0"

GENERAL NOTES:

1. SEE SHEET GI101 FOR ARCHITECTURAL LEGENDS, SYMBOLS, AND ABBREVIATIONS.
2. ALL DIMENSIONS ARE TO FACE OF STUD OR MASONRY, U.N.O.
3. ALL FLOOR FINISH TRANSITIONS OCCUR AT CENTER LINE OF DOORS IN CLOSED POSITION U.N.O.
4. COORDINATE LOCATIONS OF ALL FLOOR AND ROOF DRAINS WITH PLUMBING PLANS.
5. COORDINATE ALL EDGE OF FLOOR TILE DIMENSIONS WITH FURNITURE MANUFACTURER PRIOR TO COMMENCEMENT OF WORK.

KEY NOTES:

1 COPY MACHINE, NIC
2 REFRIGERATOR, NIC
3 PRE-MANUFACTURED WOOD LOCKERS; 12"x12"x72", DOUBLE TIER
4 ROOF ACCESS LADDER; SEE BS/AE541
5 5/8" GYPSUM BOARD OVER 3 5/8" METAL STUDS @ 16" O.C. WITH R-19 BATT INSULATION
6 3 1/2" x 3 1/2" x 5/16" STEEL TUBE WITH 3 1/2" x 6 1/2" x 5/16" BASE PLATE WITH (4) 3/8" DIAMETER x 4" STEEL EXPANSION BOLTS
7 WALL MOUNT PROJECTION SCREEN
8 4' HIGH x 3' WIDE WHITE BOARD; B.O. BOARD 3'-0" AFF
9 4' HIGH x 8' WIDE WHITE BOARD; B.O. BOARD 3'-0" AFF
10 WINDOW BLINDS; FULL HEIGHT AND WIDTH OF WINDOW
11 SOLID SURFACE WINDOW SILL
12 FIRE EXTINGUISHER AND CABINET

LEGEND:

A — WALL TYPE; SEE SHEET AE511
101A — DOOR SYMBOL; SEE DOOR SCHEDULE - SHEET AE601
ROOM 101 — ROOM SYMBOL; SEE FINISH SCHEDULE - SHEET AE601
DEPRESSED SLAB 1 1/2"

INTERIOR WALL LEGEND:

SOUND WALL; EXTEND WALL ASSEMBLY TO B.O. ROOF DECK; COMPLY WITH D1/AE511, D2/AE511, D3/AE511 AND D4/AE511

CONSTRUCTION DOCUMENTS

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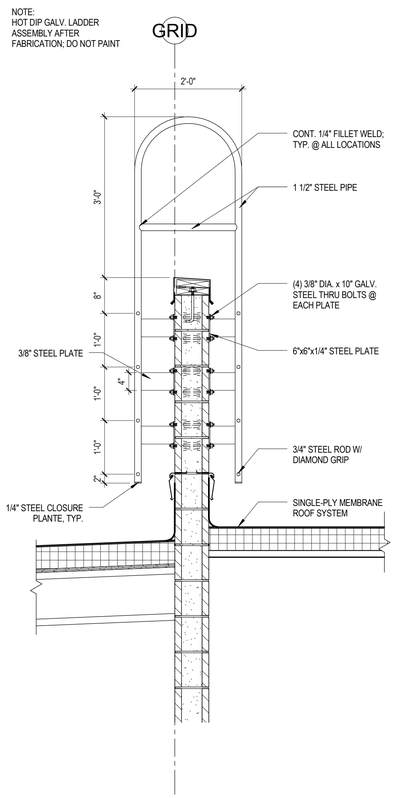
11-24-2010	10019

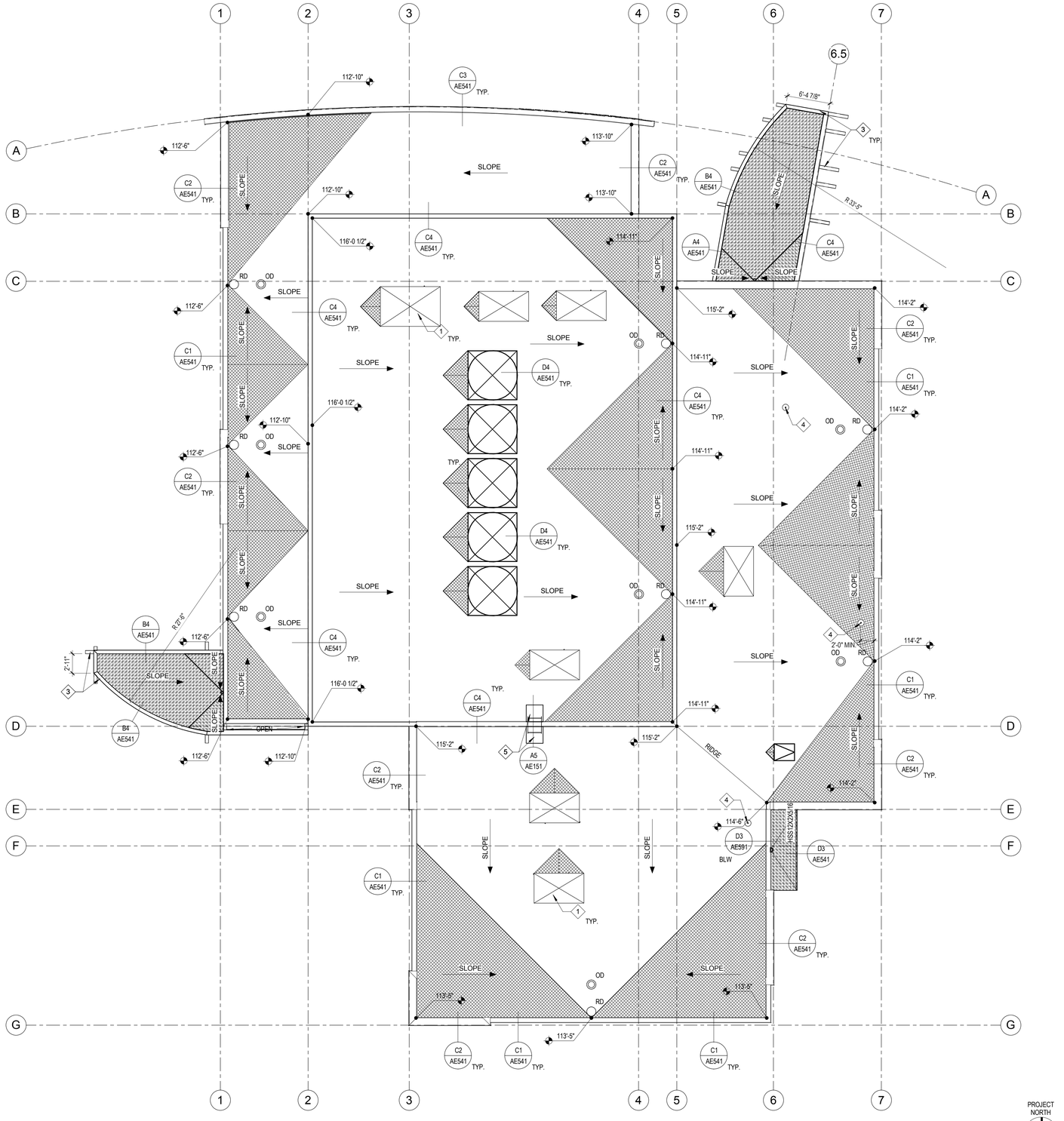
FLOOR PLAN

AE101

NOTE:
HOT DIP GALV. LADDER ASSEMBLY AFTER FABRICATION; DO NOT PAINT



A5 / AE151 LADDER DETAIL
SCALE 3/4" = 1'-0"



ROOF PLAN
SCALE 1/8" = 1'-0"

GENERAL NOTES:

1. COORDINATE EXACT ROOF DRAIN LOCATION W/ STRUCTURE
2. PROVIDE 30" X LENGTH OF EQUIPMENT; FLEXIBLE WALKWAYS @ ALL MECHANICAL EQUIPMENT
3. SEE FLOOR PLAN SHEET A101 FOR COMPLETE WALL SECTION REFERENCES
4. PROVIDE 30"x30" FLEXIBLE WALKWAYS AT ALL ROOF HATCHES

KEY NOTES:

1. MECHANICAL EQUIPMENT; SEE MECHANICAL DRAWINGS
2. UNIT SKYLIGHT; SEE D4/AE541
3. STEEL BEAM; APPLY HIGH PERFORMANCE COATING
4. VENT PIPE; SEE PLUMBING DRAWINGS
5. 30"x30" FLEXIBLE WALKWAY

LEGEND:

- R.D. — PRIMARY ROOF DRAIN; SEE DETAIL D2/AE541
- O.D. — OVERFLOW DRAIN; SEE DETAIL D2/AE541
- 0'-0" — DECK BEARING ELEVATION
- SINGLE-PLY ROOF MEMBRANE SYSTEM OVER TAPERED INSULATION SLOPED AT 1/4" PER FT. OVER 4" RIGID INSULATION; ROOF DECK IS SLOPED
- SINGLE-PLY ROOF MEMBRANE SYSTEM OVER 4" RIGID INSULATION; ROOF DECK IS SLOPED
- SINGLE-PLY MEMBRANE ROOF SYSTEM OVER TAPERED RIGID INSULATION SLOPED TO DRAIN @ 1/4" PER FOOT OVER (1) LAYER(S) OF RIGID INSULATION
- 30"x36" ROOF HATCH, SEE DETAIL D5/AE541 & C5/AE541

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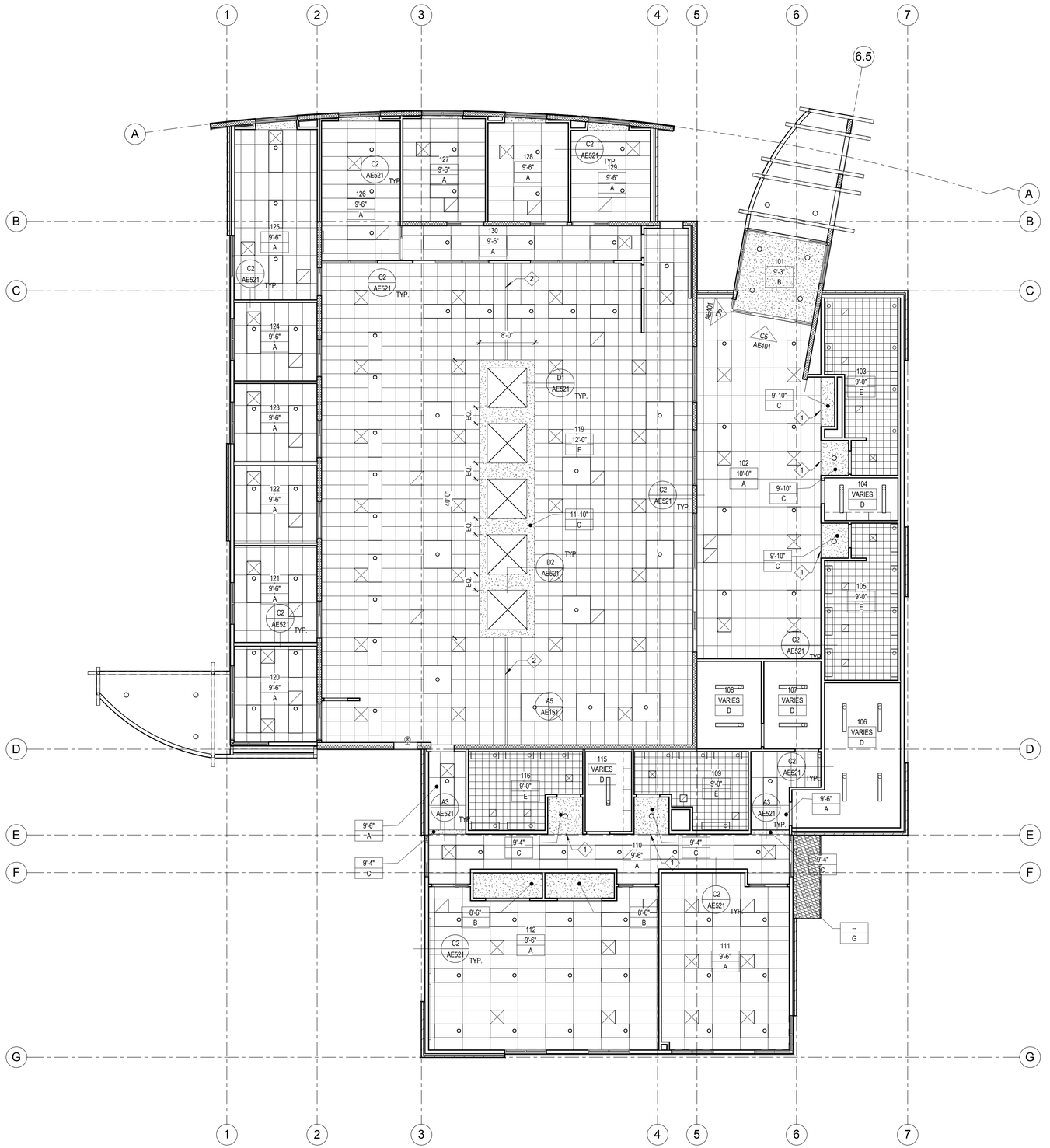
11-24-2010	10019

ROOF PLAN

AE151



REFLECTED CEILING PLAN

SCALE 1/8" = 1'-0"

PROJECT NORTH

KEY NOTES:

1 FRAMED GYP. BD. FACIA

2 SEISMIC SEPARATION JOINT; SEE B3/AE521

LEGEND:

2x4 RECESSED LIGHT FIXTURE; SEE ELECTRICAL DRWGS.

2x4 RECESSED LIGHT FIXTURE; SEE ELECTRICAL DRWGS.

RECESSED LIGHT FIXTURE; SEE ELECTRICAL DRWGS.

SUSPENDED LIGHT FIXTURE; SEE ELECTRICAL DRWGS.

CEILING TYPES:

A	2x4 ACOUSTICAL PANEL CEILING SYSTEM; SEE A1/AE521 AND B2/AE521
B	SUSP. GYP. BD. CEILING SYSTEM; SEE A2/AE521
C	FRAMED GYP. BD. SOFFIT AND FACIA
D	EXPOSED STRUCTURE; PAINT
E	12x12 ACOUSTICAL TILE ASHERED TO SUSP. GYP. BD. CEILING SYSTEM; SEE A2/AE521
F	2x2 ACOUSTICAL PANEL CEILING SYSTEM; SEE A1/AE521 AND B2/AE521
G	METAL SOFFIT PANEL SYSTEM

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REFLECTED CEILING PLAN

AE161

GENERAL NOTES:

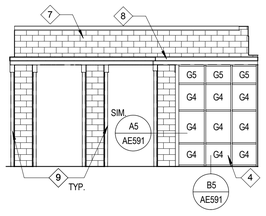
1. ALL MASONRY AND PRE-CAST CONCRETE TO RECEIVE WATER REPELLENT.
2. ALL BRICK VENEER TO HAVE RAKE JOINTS.
3. ALL CMU TO HAVE TOOLED JOINTS.

KEY NOTES:

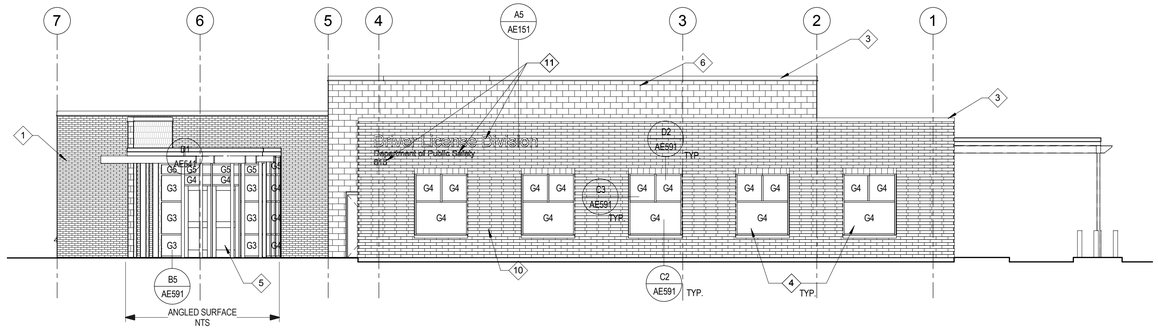
1	BRICK VENEER
2	METAL WALL PANEL SYSTEM
3	SHEET METAL FLASHING
4	ALUMINUM STOREFRONT SYSTEM
5	SCHEDULED DOOR AND FRAME
6	DECORATIVE CONCRETE MASONRY UNITS
7	8" HIGH DECORATIVE CMU
8	STEEL BEAM; APPLY HIGH PERFORMANCE COATING
9	STEEL COLUMN; APPLY HIGH PERFORMANCE COATING
10	4" HIGH DECORATIVE CMU
11	16" HIGH AND 12" HIGH DIMENSIONAL LETTER SIGN, SEE SPECIFICATIONS
12	METAL WALL PANEL JOINT; SEE B3/AE541
13	ROOF DRAIN DOWN SPOUT @ 2'-0" AFF; SEE PLUMBING DRAWINGS

GLAZING SCHEDULE

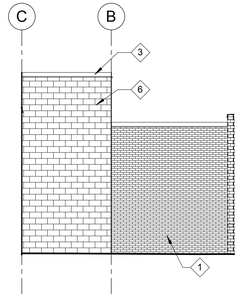
G1	1/4" CLEAR - TEMPERED
G2	1/4" CLEAR
G3	1" INSULATED - TEMPERED
G4	1" INSULATED
G5	1" INSULATED SPANDREL GLASS - TEMPERED



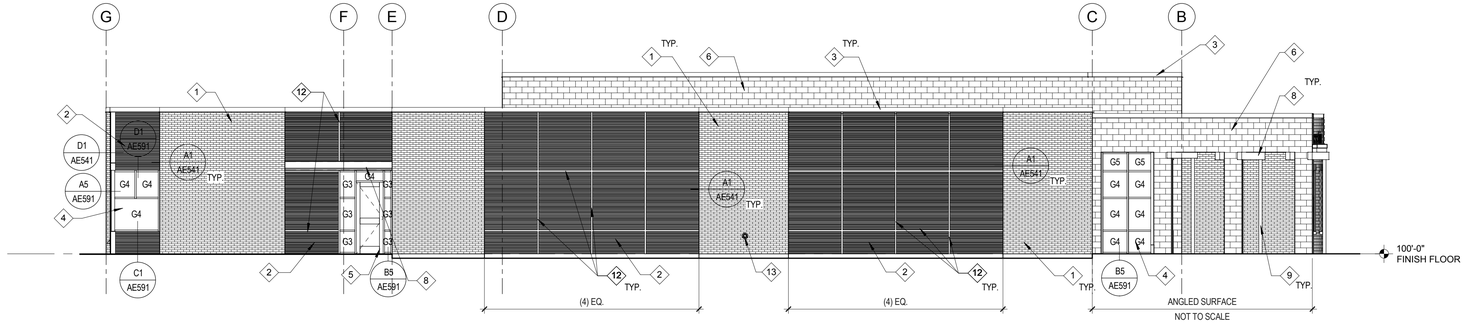
B5 / AE201 PARTIAL ELEVATION
SCALE 1/8" = 1'-0"



B4 / AE201 NORTH ELEVATION
SCALE 1/8" = 1'-0"



A5 / AE201 PARTIAL ELEVATION
SCALE 1/8" = 1'-0"



A4 / AE201 EAST ELEVATION
SCALE 1/8" = 1'-0"

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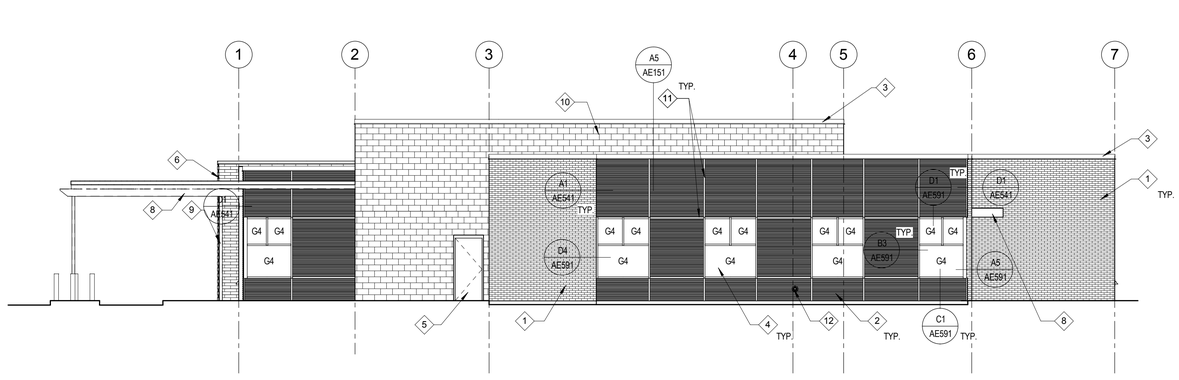
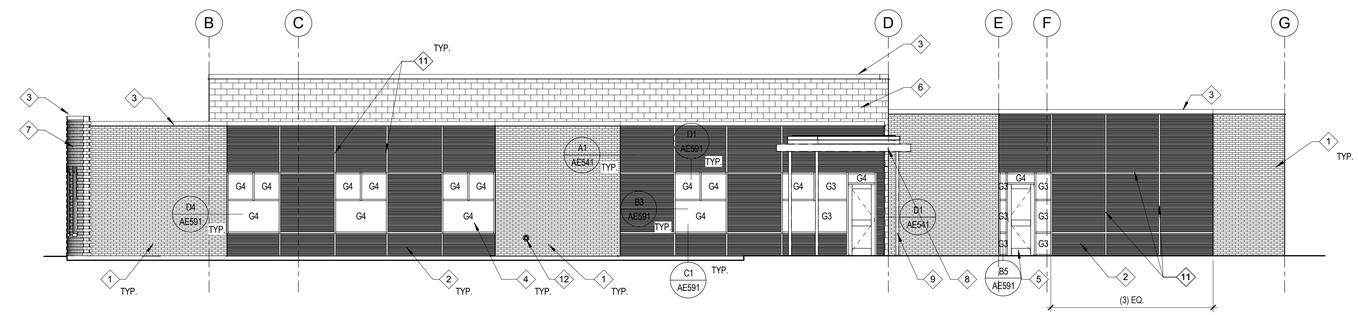
EXTERIOR ELEVATIONS

AE201



B4 AE202 SOUTH ELEVATION

SCALE 1/8" = 1'-0"



A4 AE202 WEST ELEVATION

SCALE 1/8" = 1'-0"

GENERAL NOTES:

1. ALL MASONRY AND PRE-CAST CONCRETE TO RECEIVE WATER REPELLENT.
2. ALL BRICK VENEER TO HAVE RAKE JOINTS.
3. ALL CMU TO HAVE TOOLED JOINTS.

KEY NOTES:

1	BRICK VENEER
2	METAL WALL PANEL SYSTEM
3	SHEET METAL FLASHING
4	ALUMINUM STOREFRONT SYSTEM
5	SCHEDULED DOOR AND FRAME
6	DECORATIVE CONCRETE MASONRY UNITS
7	4" HIGH DECORATIVE CMU
8	STEEL BEAM; APPLY HIGH PERFORMANCE COATING
9	STEEL COLUMN; APPLY HIGH PERFORMANCE COATING
10	8" HIGH DECORATIVE CMU
11	METAL WALL PANEL JOINT; SEE B3/AE541
12	ROOF DRAIN DOWN SPOUT @ 2'-0" AFF; SEE PLUMBING DRAWINGS

GLAZING SCHEDULE

G1	1/4" CLEAR - TEMPERED
G2	1/4" CLEAR
G3	1" INSULATED - TEMPERED
G4	1" INSULATED
G5	1" INSULATED SPANDREL GLASS - TEMPERED

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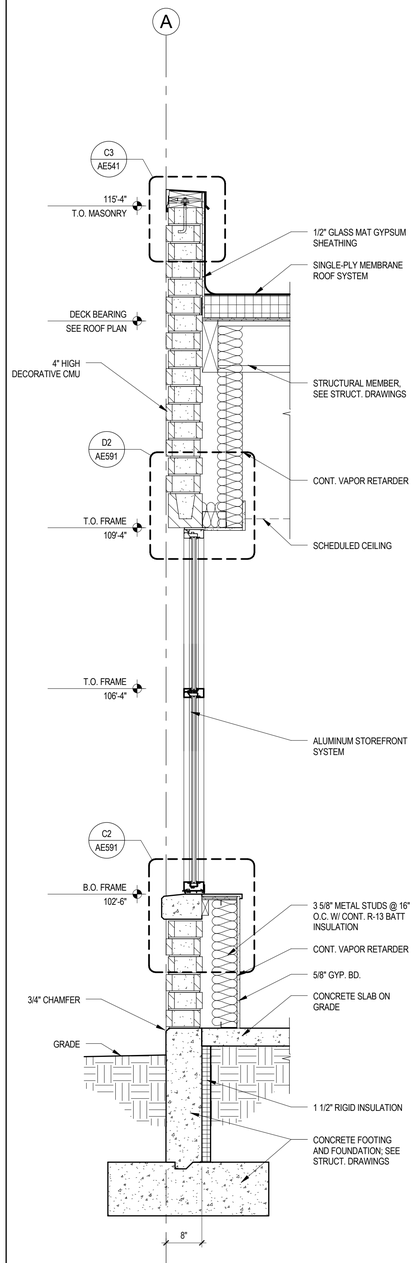
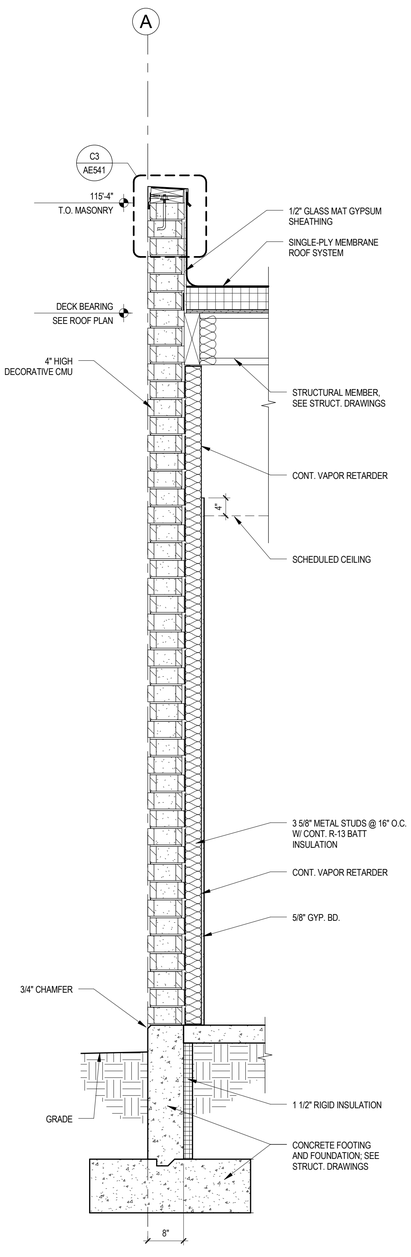
EXTERIOR ELEVATIONS

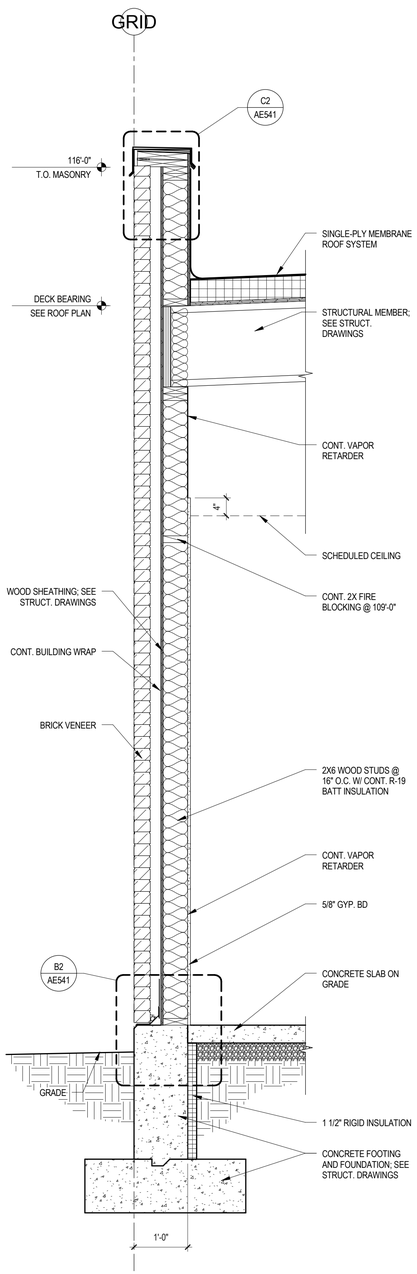
AE202



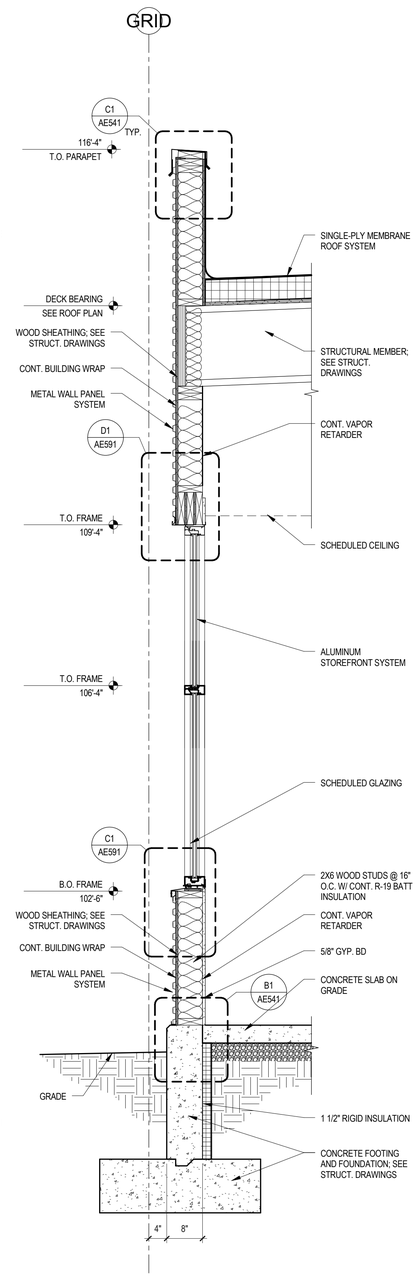
A5 / AE351 WALL SECTION
SCALE 3/4" = 1'-0"



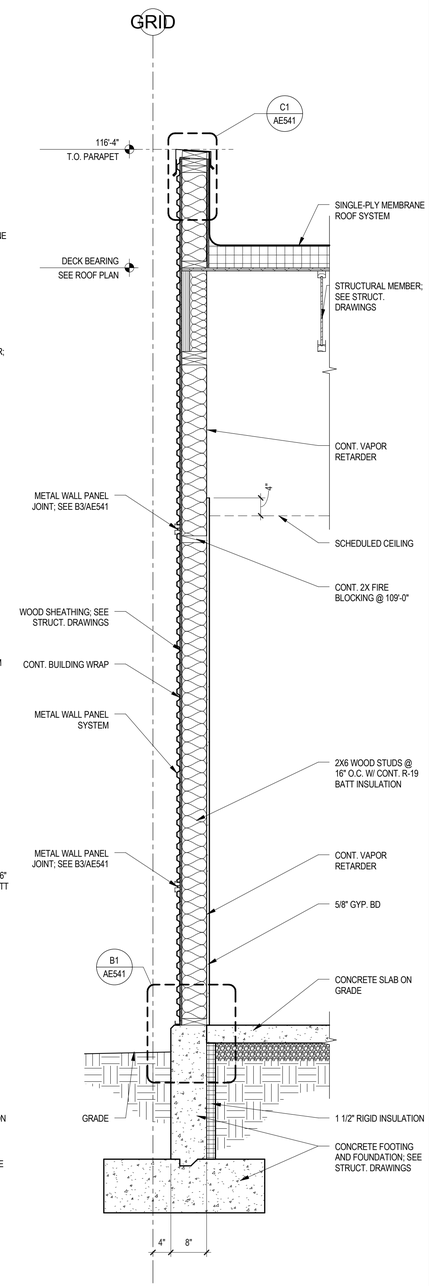
A4 / AE351 WALL SECTION
SCALE 3/4" = 1'-0"



A3 / AE351 WALL SECTION
SCALE 3/4" = 1'-0"



A2 / AE351 WALL SECTION
SCALE 3/4" = 1'-0"



A1 / AE351 WALL SECTION
SCALE 3/4" = 1'-0"

GENERAL NOTES:

1. ALL EXTERIOR STEEL INDICATED TO BE PAINTED SHALL BE PAINTED WITH HIGH PERFORMANCE COATING.
2. ALL EXTERIOR MASONRY AND PRE-CAST CONCRETE SURFACES TO RECEIVE WATER REPELLENT.

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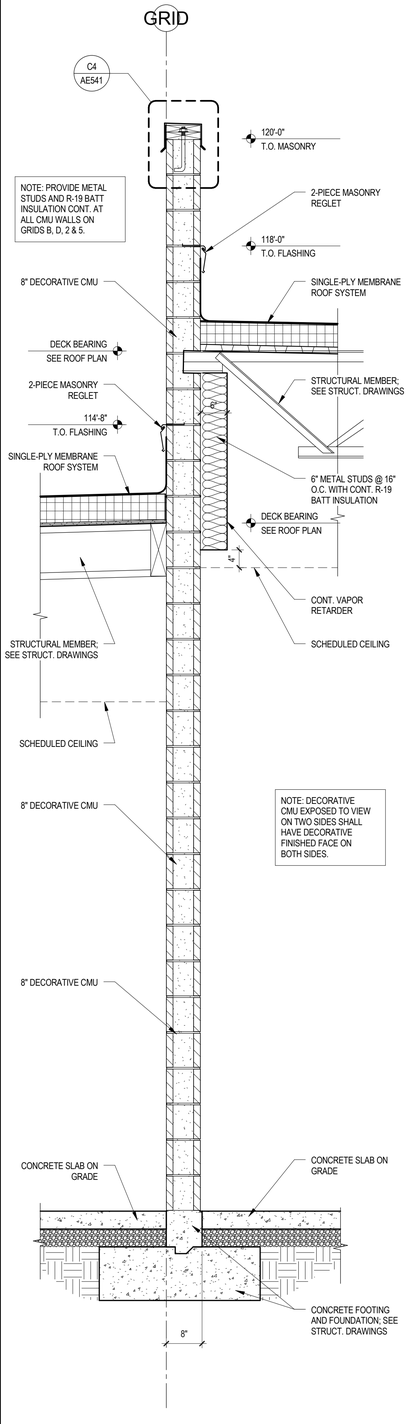
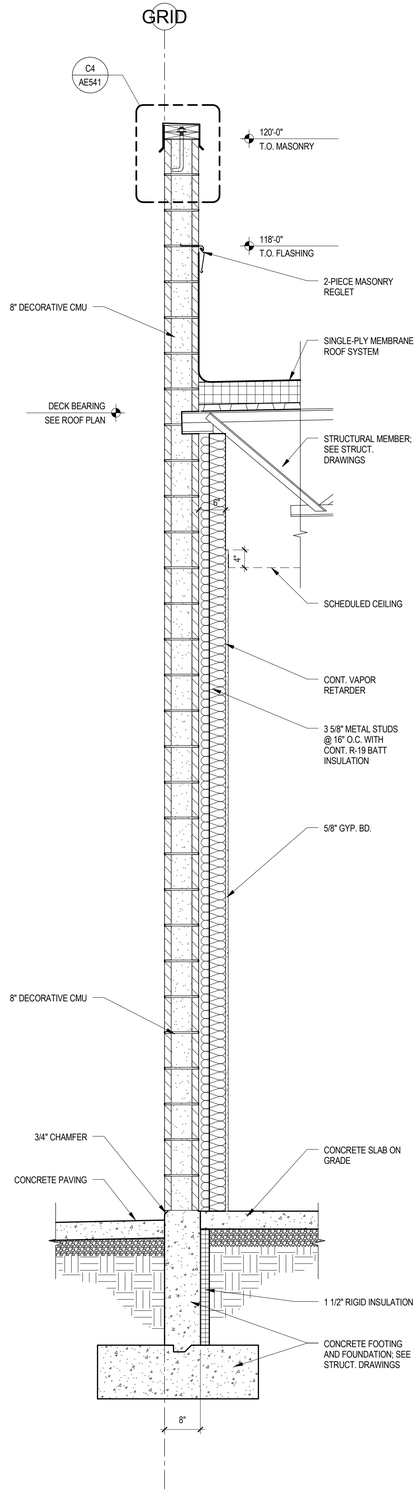
11-24-2010	10019

WALL SECTIONS

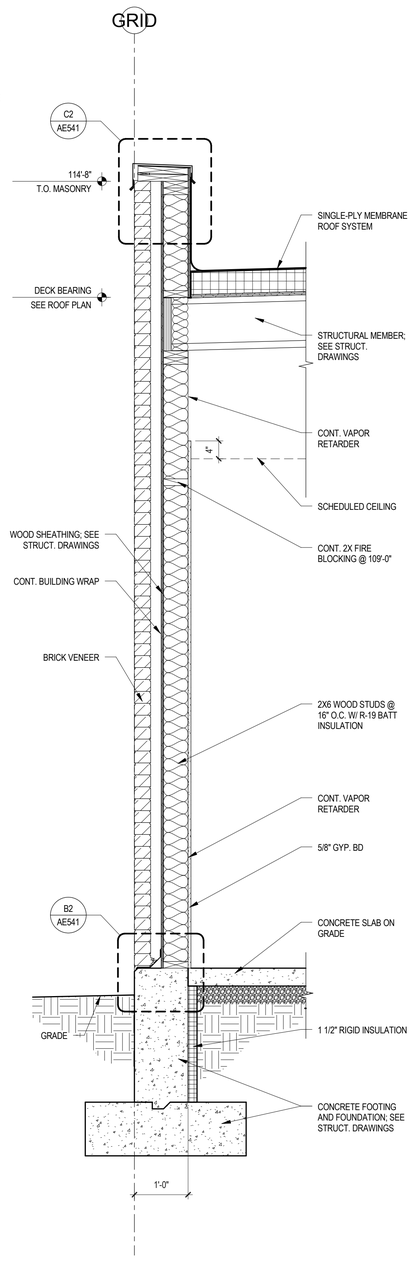
AE351



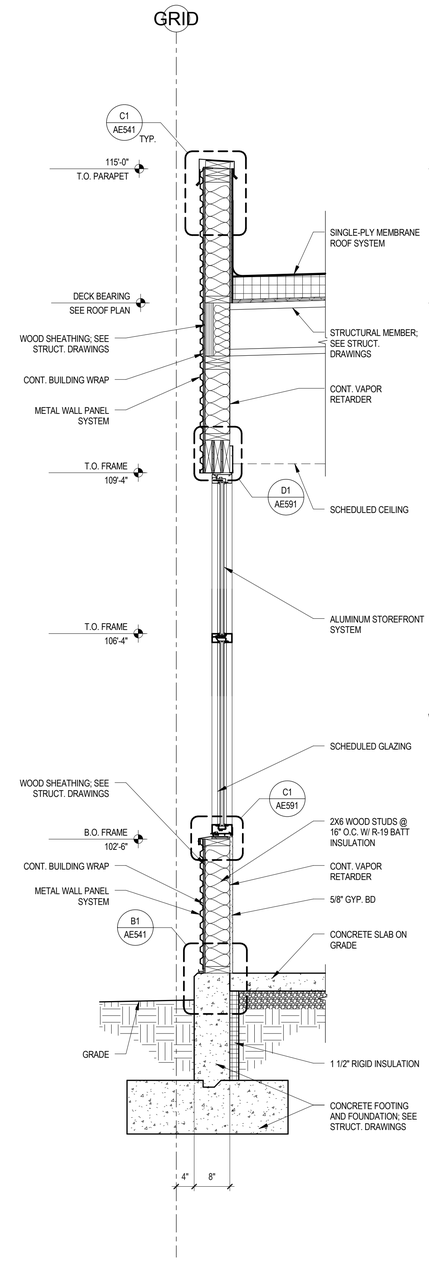
A5 / AE352 WALL SECTION
SCALE 3/4" = 1'-0"



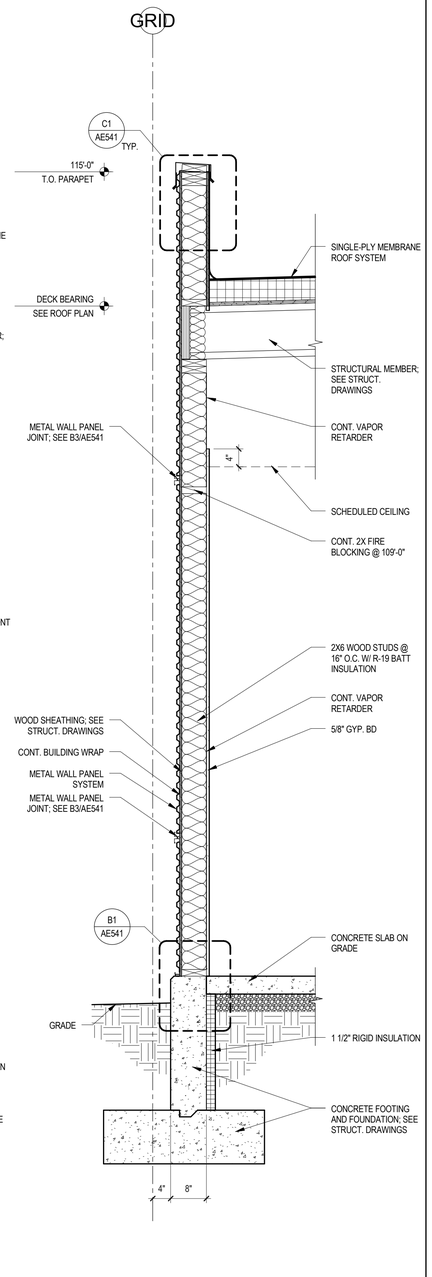
A4 / AE352 WALL SECTION
SCALE 3/4" = 1'-0"



A3 / AE352 WALL SECTION
SCALE 3/4" = 1'-0"



A2 / AE352 WALL SECTION
SCALE 3/4" = 1'-0"



A1 / AE352 WALL SECTION
SCALE 3/4" = 1'-0"

GENERAL NOTES:

1. ALL EXTERIOR STEEL INDICATED TO BE PAINTED SHALL BE PAINTED WITH HIGH PERFORMANCE COATING.
2. ALL EXTERIOR MASONRY AND PRE-CAST CONCRETE SURFACES TO RECEIVE WATER REPELLENT.

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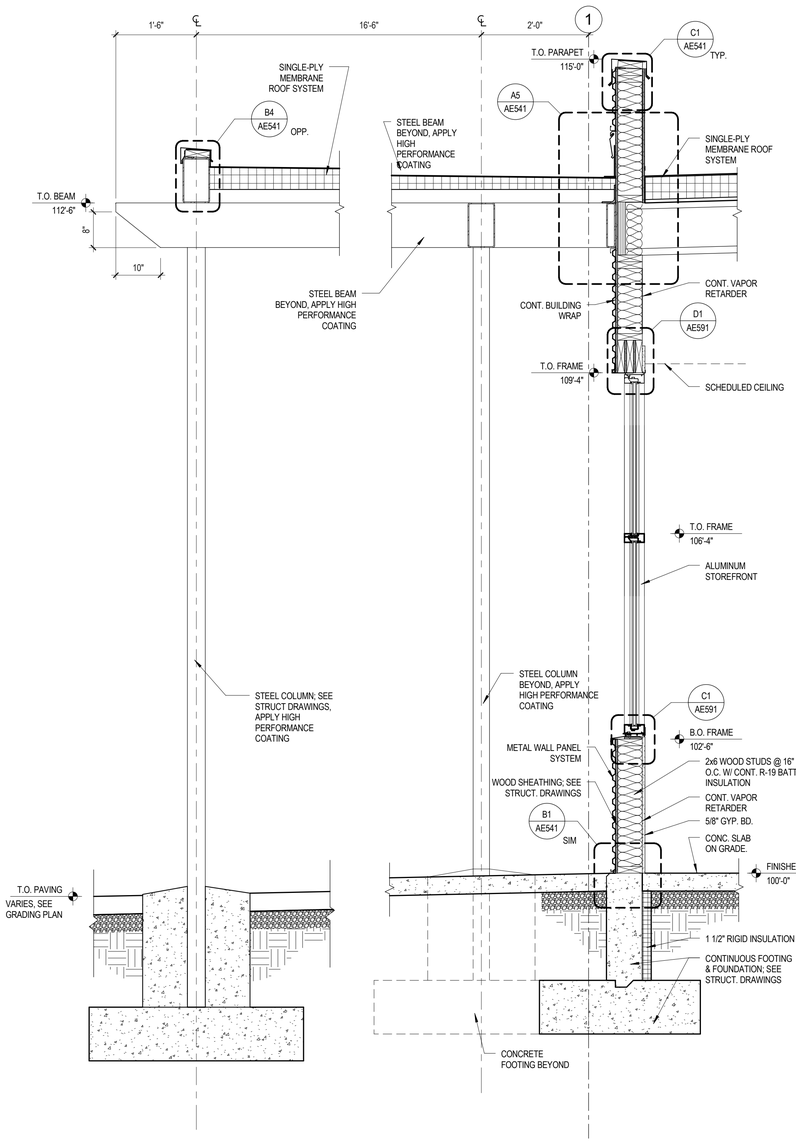
11-24-2010	10019

WALL SECTIONS

AE352



A5 AE353 CANOPY SECTION
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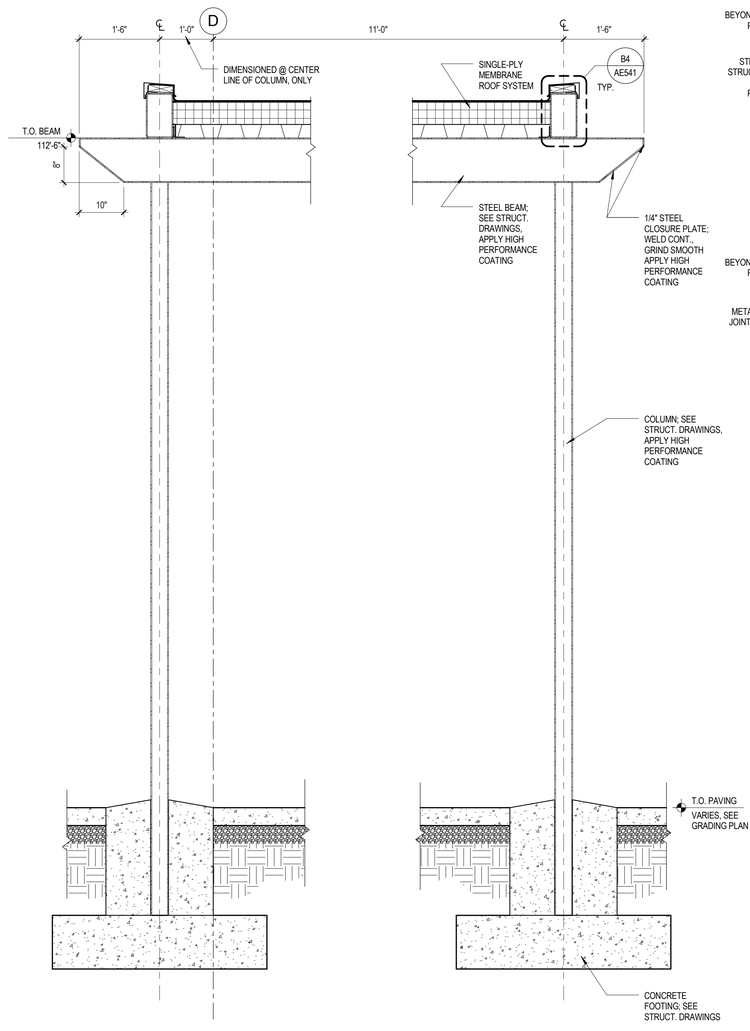

A3 AE353 CANOPY SECTION
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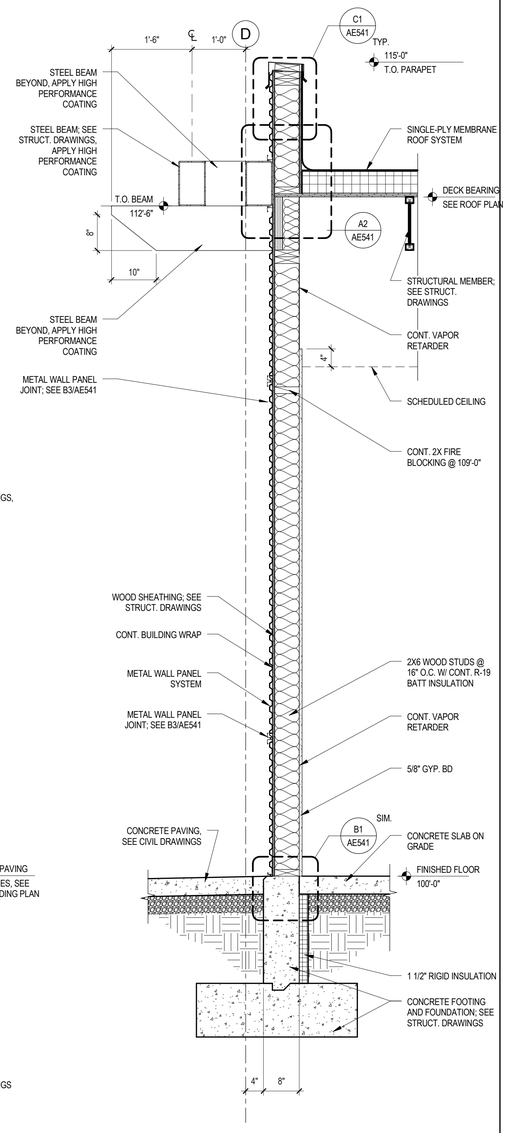

A1 AE353 CANOPY SECTION
SCALE 3/4" = 1'-0"

GENERAL NOTES:

1. ALL EXTERIOR STEEL INDICATED TO BE PAINTED SHALL BE PAINTED WITH HIGH PERFORMANCE COATING.
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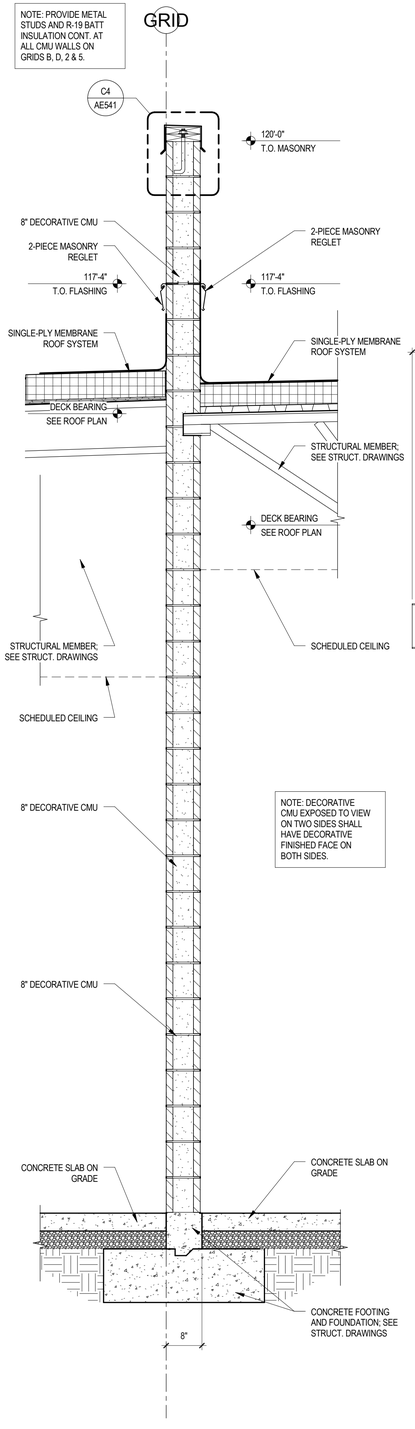
WALL SECTIONS

AE353



A5 AE354 WALL SECTION
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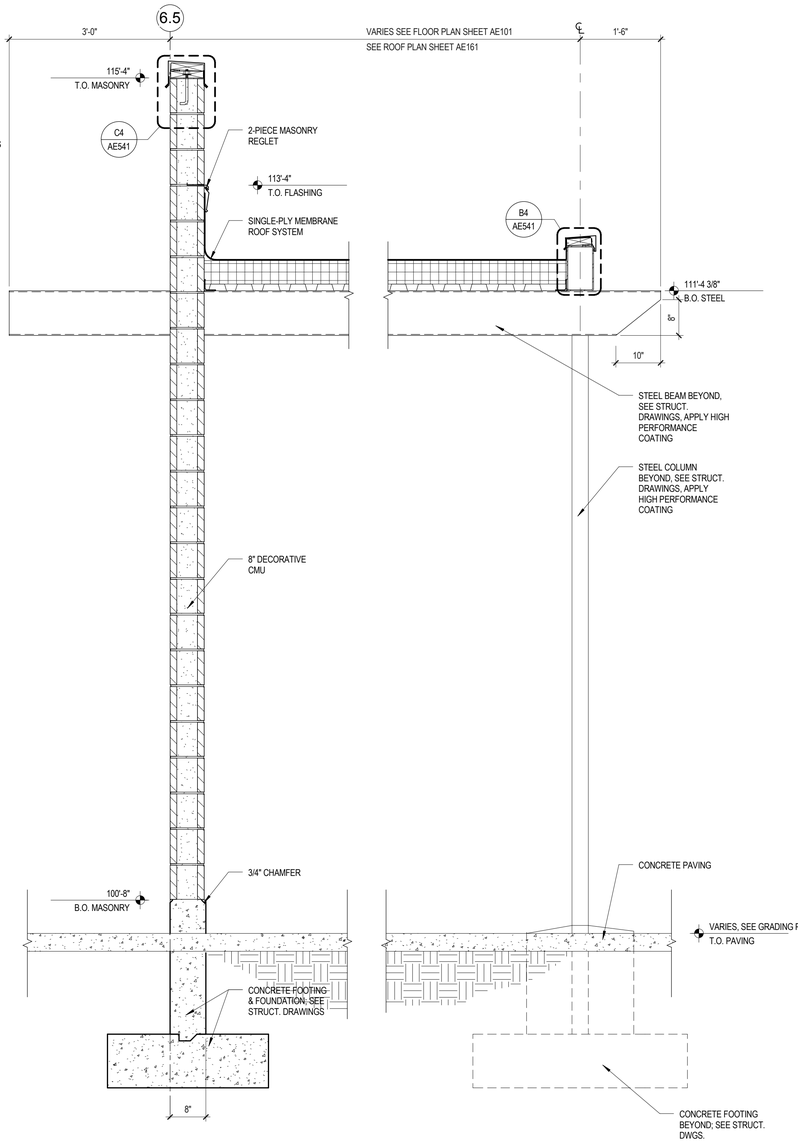

A4 AE354 CANOPY SECTION
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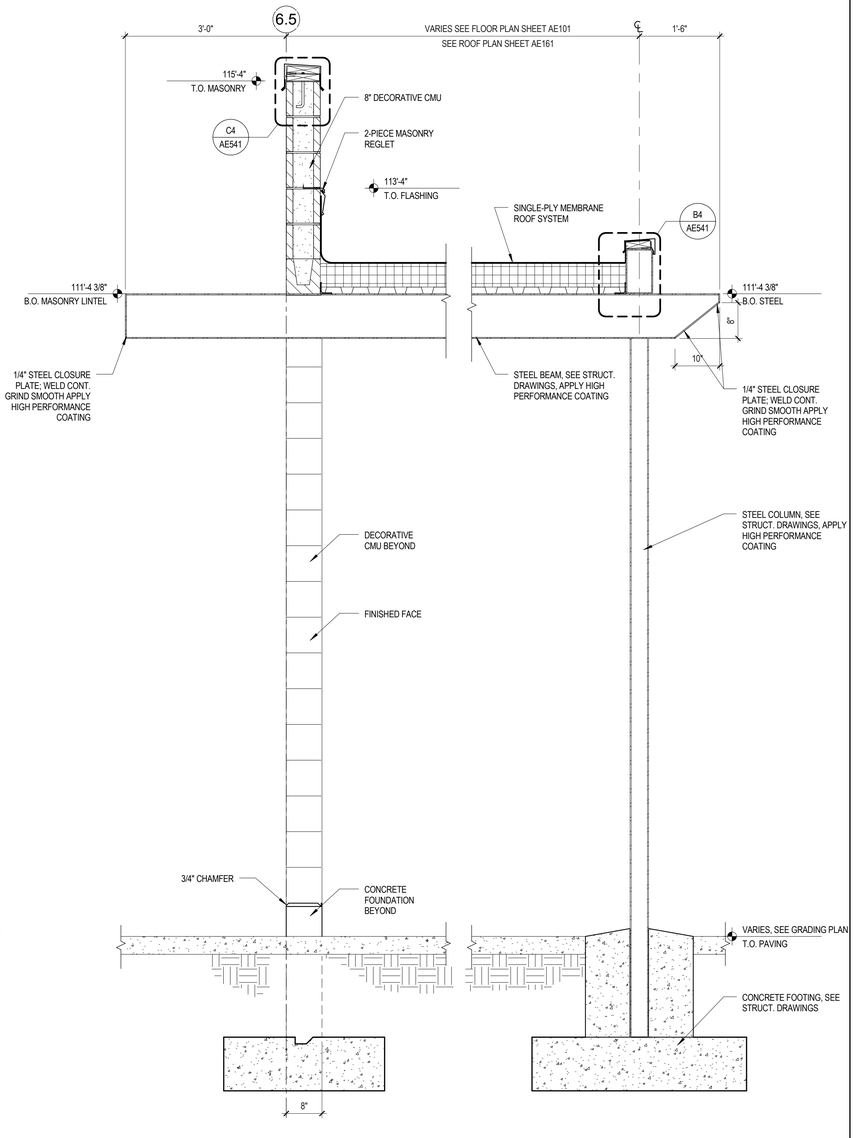

A2 AE354 CANOPY SECTION
SCALE 3/4" = 1'-0"

GENERAL NOTES:

1. ALL EXTERIOR STEEL INDICATED TO BE PAINTED SHALL BE PAINTED WITH HIGH PERFORMANCE COATING.
2. ALL EXTERIOR MASONRY AND PRE-CAST CONCRETE SURFACES TO RECEIVE WATER REPELLENT.

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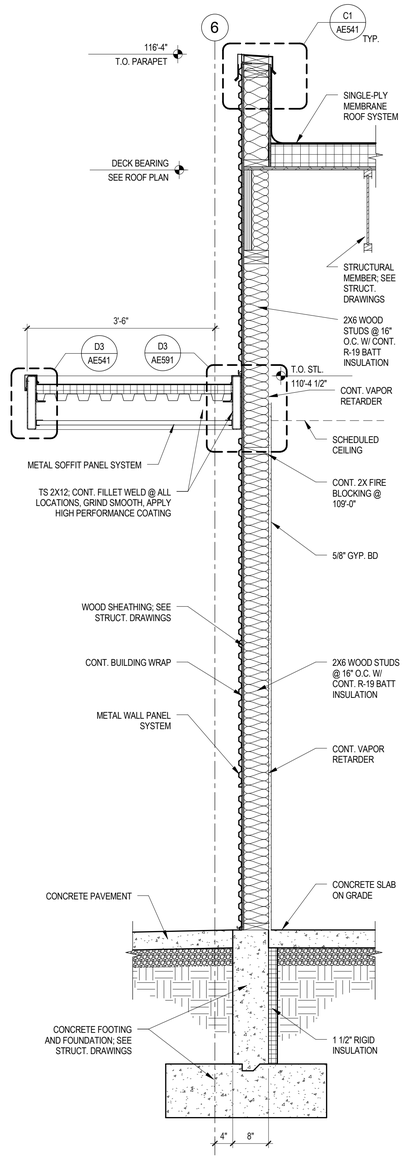
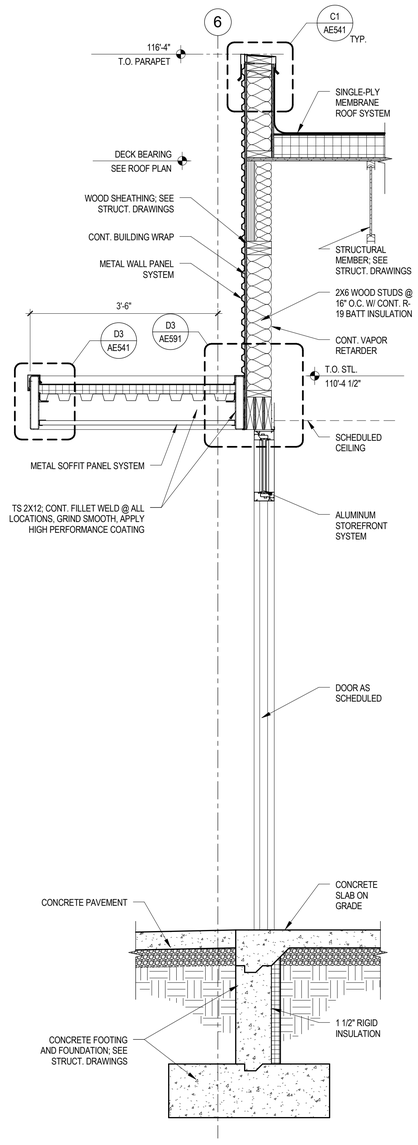
11-24-2010	10019

WALL SECTIONS

AE354



A5 / AE355 WALL SECTION
SCALE 3/4" = 1'-0"



A4 / AE355 WALL SECTION
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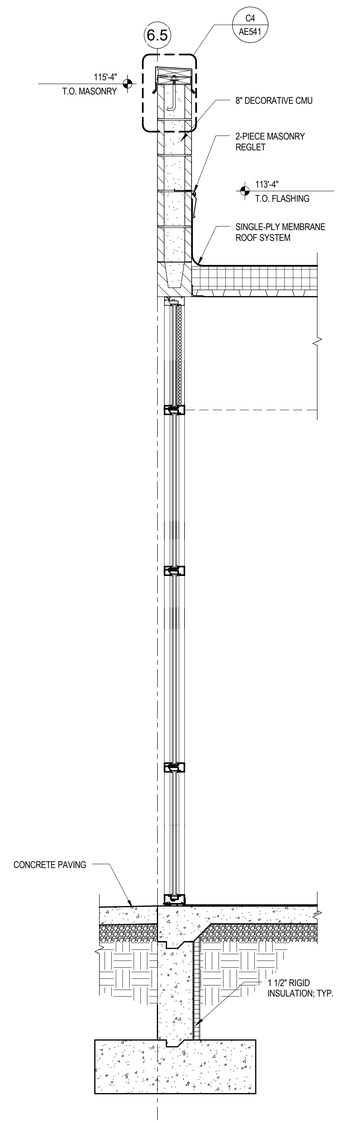

A3 / AE355 CANOPY SECTION
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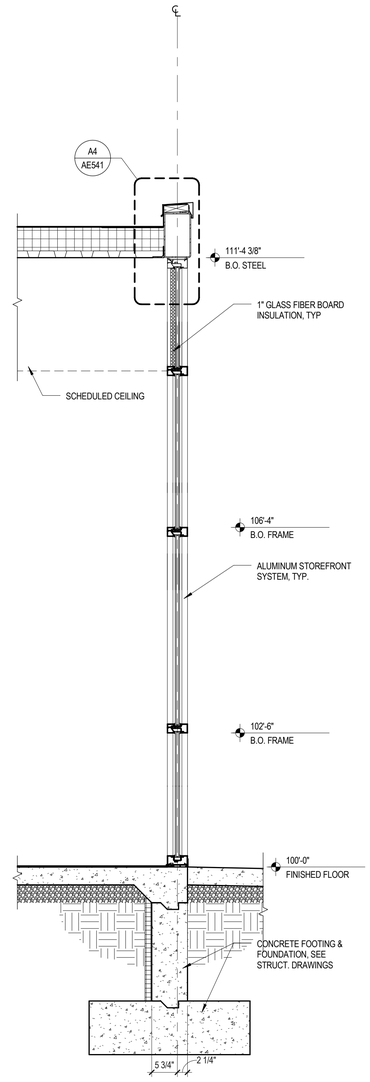

GENERAL NOTES:

1. ALL EXTERIOR STEEL INDICATED TO BE PAINTED SHALL BE PAINTED WITH HIGH PERFORMANCE COATING.
2. ALL EXTERIOR MASONRY AND PRE-CAST CONCRETE SURFACES TO RECEIVE WATER REPELLENT.

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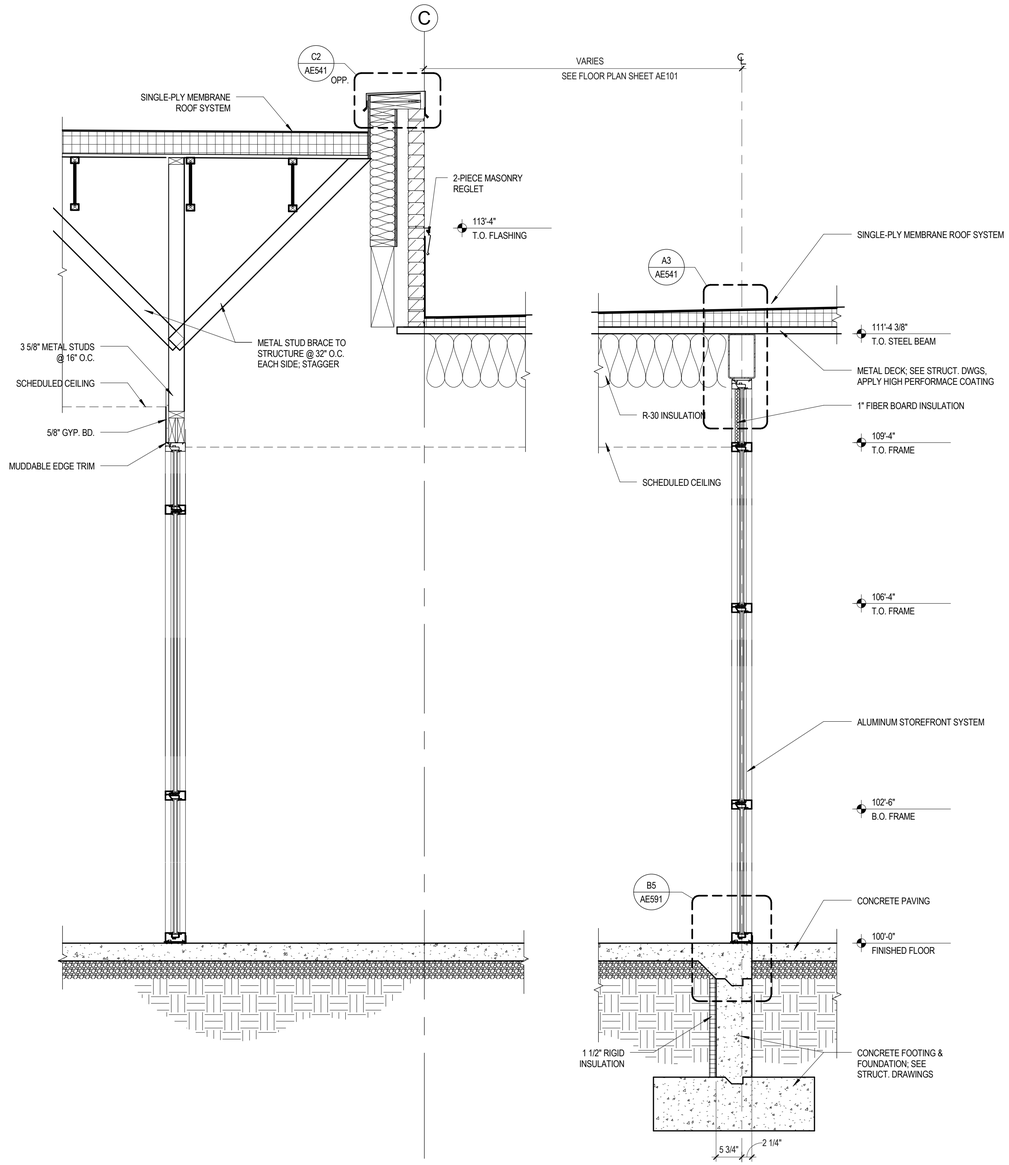
WALL SECTIONS

AE355



A3 / AE356 WALL SECTION

SCALE 3/4" = 1'-0"

GENERAL NOTES:

1. ALL EXTERIOR STEEL INDICATED TO BE PAINTED SHALL BE PAINTED WITH HIGH PERFORMANCE COATING.
2. ALL EXTERIOR MASONRY AND PRE-CAST CONCRETE SURFACES TO RECEIVE WATER REPELLENT.

CONSTRUCTION DOCUMENTS

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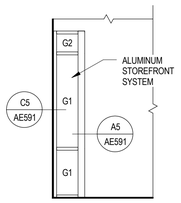
DATE/REVISION	PROJECT #.
11-24-2010	10019

WALL SECTIONS

AE356

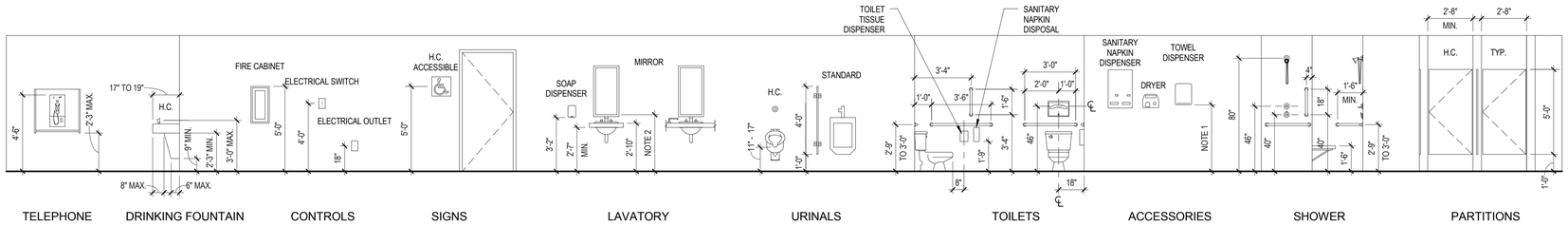


D5 AE401 INTERIOR ELEVATION
SCALE 1/4" = 1'-0"

NOTES:
- ALL MEASUREMENTS ARE TO FINISH FLOOR
- ALL ADA ACCESSIBLE FIXTURES TO COMPLY WITH ANSI A117 LATEST EDITION
- ENCLOSURE CAN PROTRUDE A MAX. OF 19" AND CANNOT REDUCE THE MIN. REQUIRED CLEAR WIDTH OF ACCESSIBLE PATH.

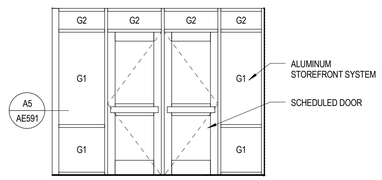
NOTE 2- 40" MAX. TO BOTTOM OF REFLECTING SURFACE

NOTE 1: 48" MAX. HT. FOR ACCESSORY CONTROLS ACCESSED BY A FORWARD REACH (PREFERRED) OR 54" MAX. HT. FOR SIDE REACH

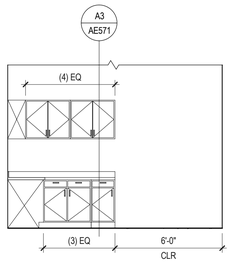


TELEPHONE | DRINKING FOUNTAIN | CONTROLS | SIGNS | LAVATORY | URINALS | TOILETS | ACCESSORIES | SHOWER | PARTITIONS

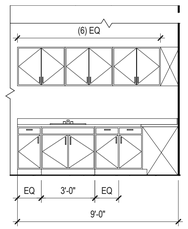
D4 AE401 STANDARD MOUNTING HEIGHTS
SCALE 1/4" = 1'-0"



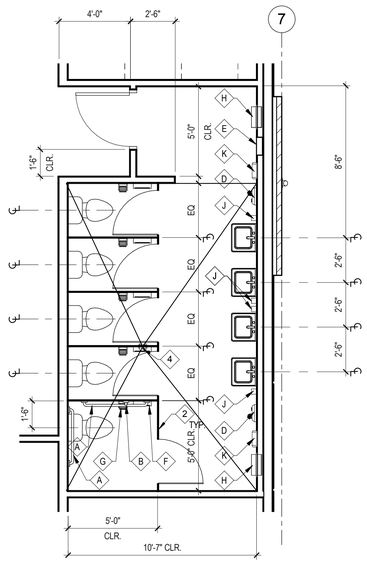
C5 AE401 INTERIOR ELEVATION
SCALE 1/4" = 1'-0"



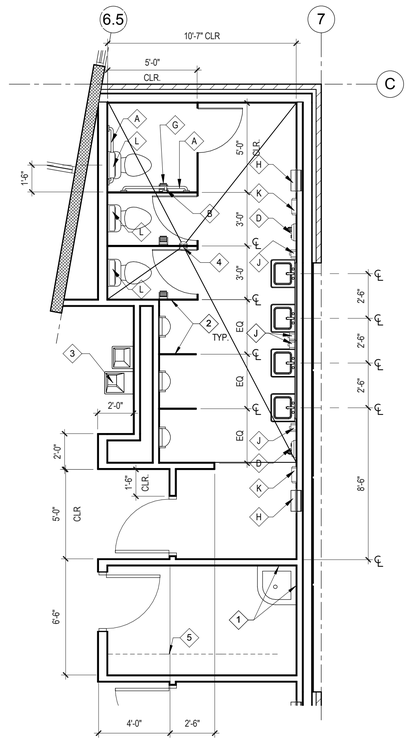
C4 AE401 BREAKROOM NORTH ELEVATION
SCALE 1/4" = 1'-0"



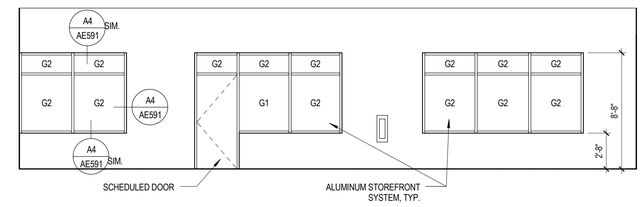
C3 AE401 BREAKROOM WEST ELEVATION
SCALE 1/4" = 1'-0"



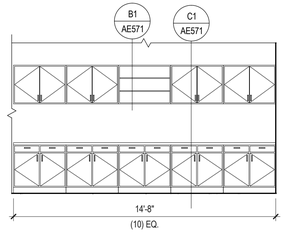
B2 AE401 ENLARGED WOMEN'S RESTROOM PLAN
SCALE 1/4" = 1'-0"



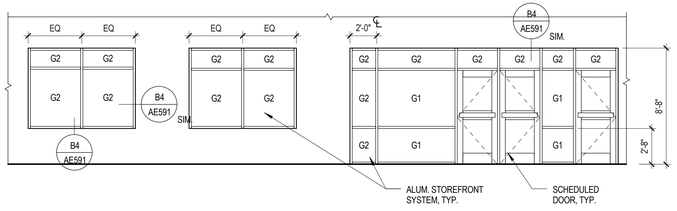
B1 AE401 ENLARGED MEN'S RESTROOM PLAN
SCALE 1/4" = 1'-0"



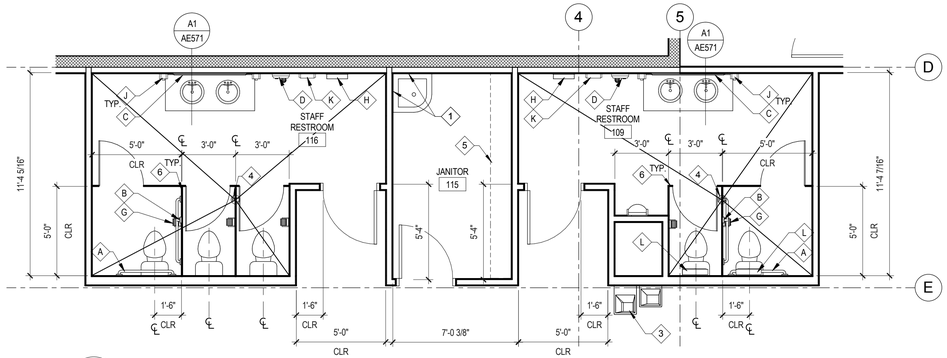
B5 AE401 NORTH WALL ELEVATION
SCALE 3/16" = 1'-0"



B3 AE401 COPY ROOM 125 - MILLWORK ELEVATION
SCALE 1/4" = 1'-0"



A5 AE401 EAST WALL ELEVATION
SCALE 3/16" = 1'-0"



A3 AE401 ENLARGED RESTROOMS PLAN
SCALE 1/4" = 1'-0"

GENERAL NOTES:

1

GLAZING SCHEDULE

G1	1/4" CLEAR - TEMPERED
G2	1/4" CLEAR
G3	1" INSULATED - TEMPERED
G4	1" INSULATED
G5	1" INSULATED SPANDREL GLASS - TEMPERED

KEY NOTES:

1 3'-0" X 3'-0" WALL TILE @ (2) WALLS ADJACENT TO JANITOR SINK
2 SOLID-POLYMER TOILET COMPARTMENTS AND SCREENS
3 DRINKING FOUNTAIN; SEE PLUMBING DRAWINGS
4 FLOOR DRAIN; SEE PLUMBING DRAWINGS
5 MILLWORK SEE C2/AE571
6 STEEL TOILET COMPARTMENTS

TOILET ACCESSORIES:

A 36" AND 42" GRAB BARS
B 18" VERTICAL BRAB BAR
C MIRROR
D WARM AIR HAND DRYER
E VENDING
F SANITARY NAPKIN RECEPTICLE
G TOILET TISSUE DISPENSER, N.I.C.; PROVIDE BLOCKING
H WASTE RECEPTACLE
J SOAP DISPENSER, N.I.C.; PROVIDE BLOCKING
K TOWEL DISPENSER, N.I.C.; PROVIDE BLOCKING
L TOILET SEAT COVER DISPENSER, N.I.C.; PROVIDE BLOCKING

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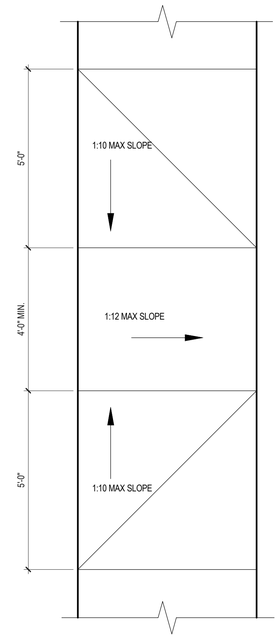
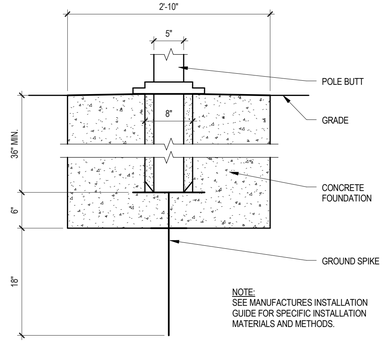
ENLARGED FLOOR PLANS

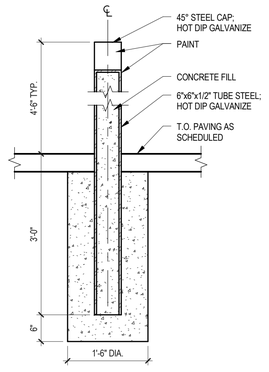
AE401



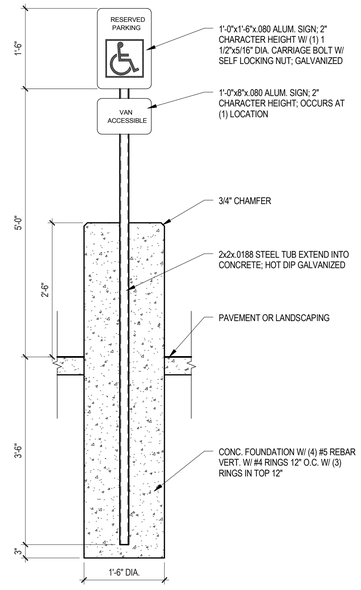
C1 / AE501 SIDEWALK RAMP
SCALE 1/2" = 1'-0"



A3 / AE501 FLAGPOLE BASE
SCALE 1" = 1'-0"



A2 / AE501 BOLLARD DETAIL
SCALE 3/4" = 1'-0"



A1 / AE501 ADA PARKING STALL SIGN
SCALE 3/4" = 1'-0"

KEY NOTES:

CONSTRUCTION DOCUMENTS

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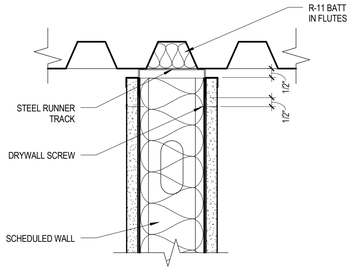
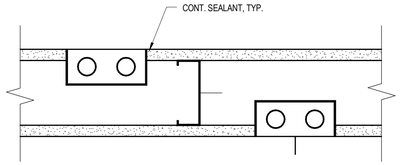
SITE DETAILS

AE501

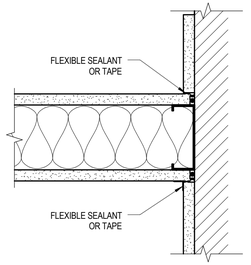


D4 AE511 SOUND WALL HEAD DETAIL
SCALE 3" = 1'-0"



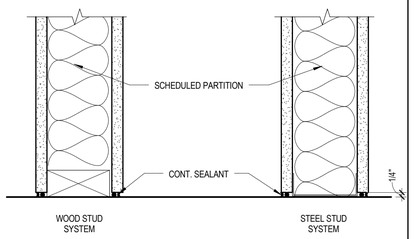
PLAN
BOXES OFFSET ONE STUD SPACE
AND SEALING OF OPENINGS
THROUGH PARTITIONS

D3 AE511 SOUND WALL DETAIL - PENETRATIONS
SCALE 3" = 1'-0"

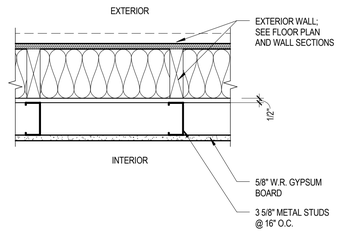


PLAN
INTERSECTION W/
INTERIOR WALL

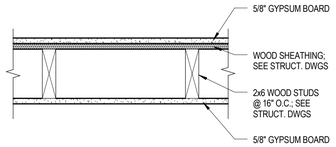
D2 AE511 SOUND WALL DETAIL - TO EXISTING
SCALE 3" = 1'-0"



D1 AE511 SOUND WALL DETAIL - FLOOR
SCALE 3" = 1'-0"

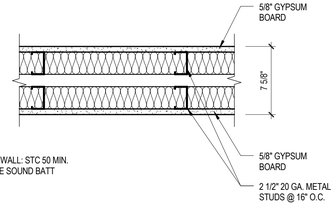


B1 AE511 WALL TYPE E
SCALE 1 1/2" = 1'-0"



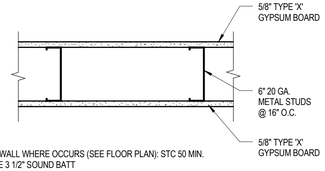
NOTE: PROVIDE AND INSTALL 5/8" WATER RESISTANT (W.R.) GYP. BD. IN LIEU OF GYP. BD. @ ALL RESTROOM LOCATIONS

A4 AE511 WALL TYPE D
SCALE 1 1/2" = 1'-0"



SOUND WALL: STC 50 MIN.
INCLUDE SOUND BATT

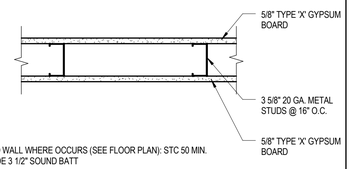
A3 AE511 WALL TYPE C
SCALE 1 1/2" = 1'-0"



SOUND WALL WHERE OCCURS (SEE FLOOR PLAN): STC 50 MIN.
INCLUDE 3 1/2" SOUND BATT

NOTE: PROVIDE AND INSTALL 5/8" WATER RESISTANT (W.R.) GYP. BD. IN LIEU OF GYP. BD. @ ALL RESTROOM LOCATIONS

A2 AE511 WALL TYPE B
SCALE 1 1/2" = 1'-0"



SOUND WALL WHERE OCCURS (SEE FLOOR PLAN): STC 50 MIN.
INCLUDE 3 1/2" SOUND BATT

NOTE: PROVIDE AND INSTALL 5/8" WATER RESISTANT (W.R.) GYP. BD. IN LIEU OF GYP. BD. @ ALL RESTROOM LOCATIONS

A1 AE511 WALL TYPE A
SCALE 1 1/2" = 1'-0"

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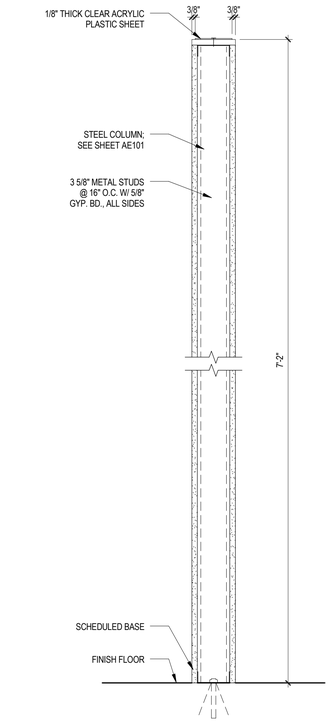
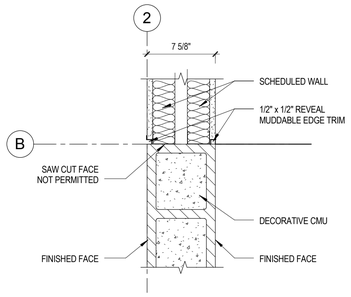
WALL TYPES

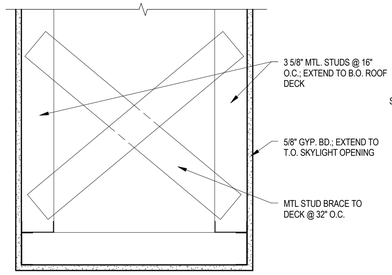
AE511



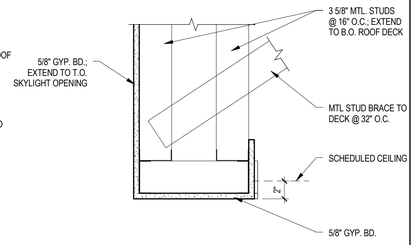
C4 AE521 HALF WALL DETAIL
SCALE 1 1/2" = 1'-0"



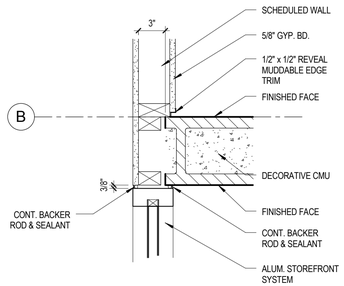
D3 AE521 INTERIOR DETAIL
SCALE 1 1/2" = 1'-0"



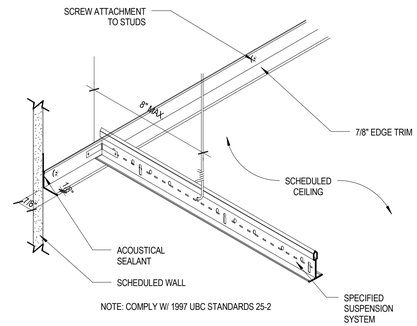
D2 AE521 SOFFIT @ SKYLIGHT
SCALE 1 1/2" = 1'-0"



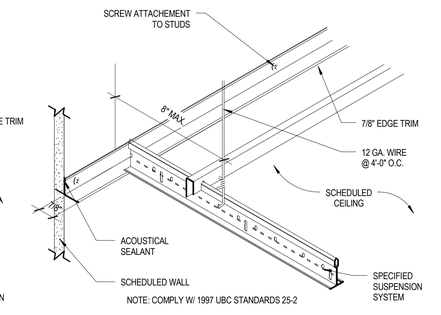
D1 AE521 SOFFIT @ SKYLIGHT
SCALE 1 1/2" = 1'-0"



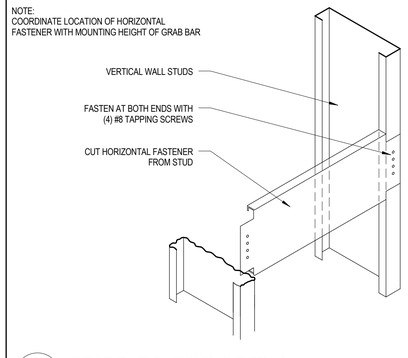
C3 AE521 STOREFRONT @ WALL
SCALE 1 1/2" = 1'-0"



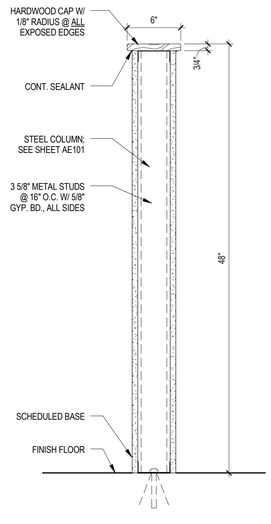
C2 AE521 RESTRAINED EDGE DETAIL @ ACOUSTICAL LAY-IN CEILING
SCALE 3" = 1'-0"



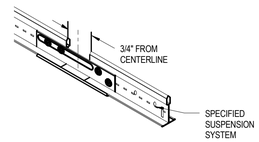
C1 AE521 UNRESTRAINED EDGE DETAIL @ ACOUSTICAL LAY-IN CEILING
SCALE 3" = 1'-0"



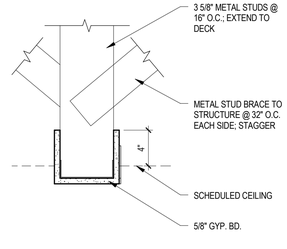
A5 AE521 GRAB BAR BLOCKING DETAIL
SCALE 3/8" = 1'-0"



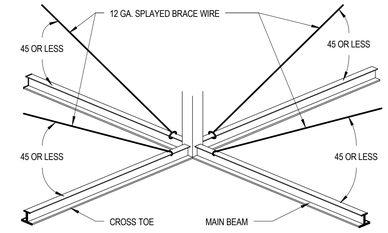
A4 AE521 HALF WALL DETAIL
SCALE 1 1/2" = 1'-0"



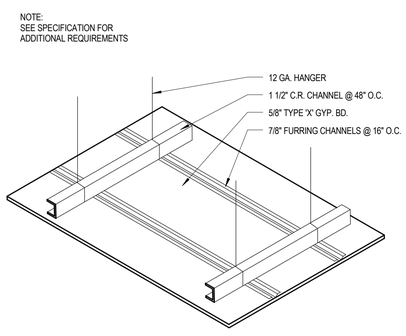
1 AE521 SEISMIC SEPARATION JOINT @ LAY-IN CEILING
SCALE 3" = 1'-0"



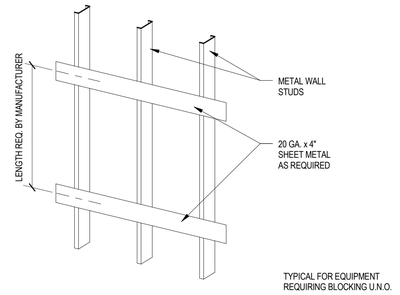
A3 AE521 SOFFIT DETAIL
SCALE 1 1/2" = 1'-0"



B2 AE521 SUSPENDED CEILING LATERAL BRACING
SCALE 1 1/2" = 1'-0"

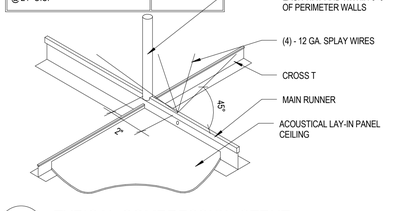


A2 AE521 SUSPENDED GYP. BD. CEILING SYSTEM
SCALE 3" = 1'-0"



B1 AE521 BLOCKING DETAIL
SCALE 3" = 1'-0"

STRUT SIZE	MAXIMUM LENGTH
3/4" DIAMETER CONDUIT (EMT)	8'-6"
1" DIAMETER CONDUIT (EMT)	10'-0"
SINGLE 2 1/2" X 20 GA. METAL STUD (tmin = 0.18 in4)	11'-6"
BACK TO BACK 2 1/2" X 20 GA. METAL STUDS SCREWED TOGETHER @ 24" O.C.	15'-0"



A1 AE521 TYPICAL COMPRESSION STRUT
SCALE 3" = 1'-0"

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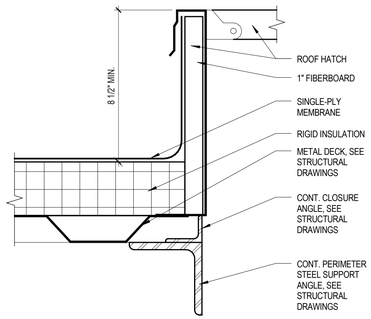
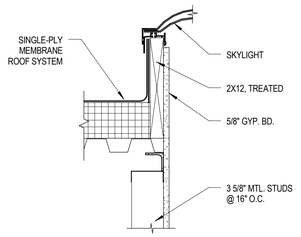
INTERIOR FINISH DETAILS

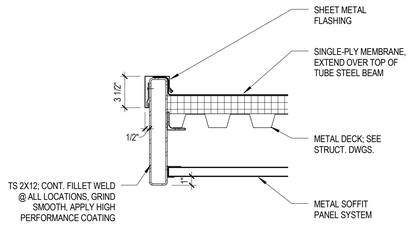
AE521



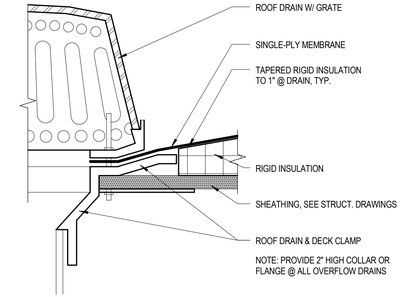
D5 AE541 ROOF HATCH DETAIL
SCALE 3" = 1'-0"



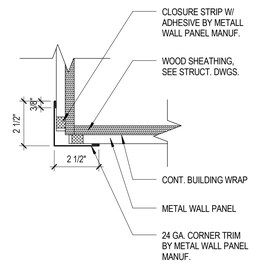
D4 AE541 SKYLIGHT DETAIL
SCALE 1 1/2" = 1'-0"



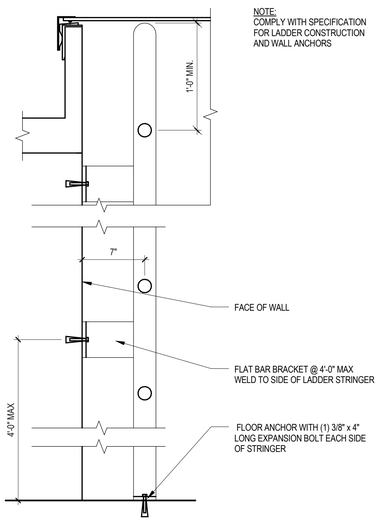
D3 AE541 CANOPY EDGE DETAIL
SCALE 1 1/2" = 1'-0"



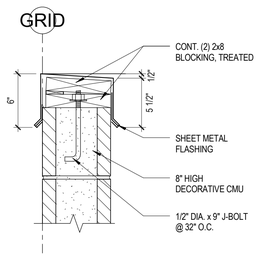
D2 AE541 ROOF / OVERFLOW DRAIN DETAIL
SCALE 3" = 1'-0"



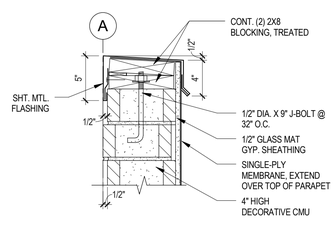
D1 AE541 METAL WALL PANEL DETAIL
SCALE 3" = 1'-0"



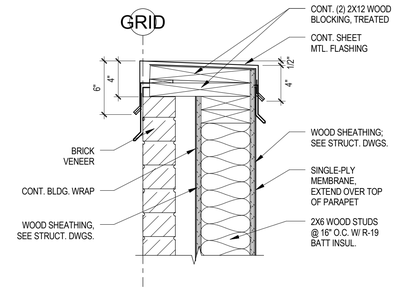
B5 AE541 ACCESS LADDER
SCALE 1 1/2" = 1'-0"



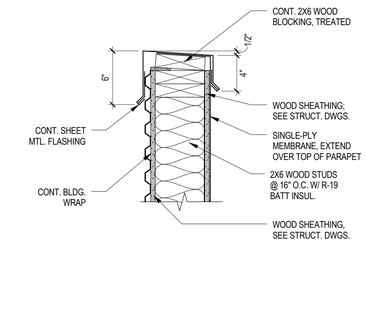
B4 AE541 CANOPY DETAIL
SCALE 1 1/2" = 1'-0"



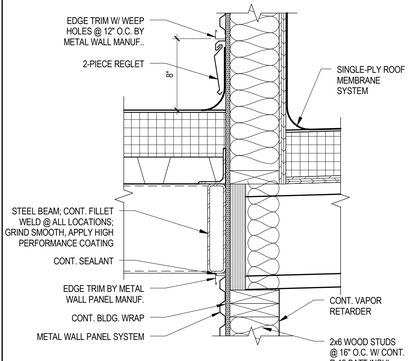
B3 AE541 METAL WALL PANEL JOINT DETAIL
SCALE 1 1/2" = 1'-0"



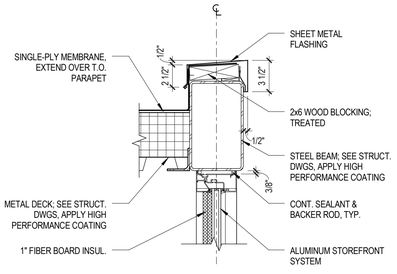
B2 AE541 WALL DETAIL
SCALE 1 1/2" = 1'-0"



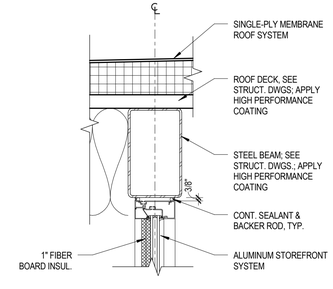
B1 AE541 WALL DETAIL
SCALE 1 1/2" = 1'-0"



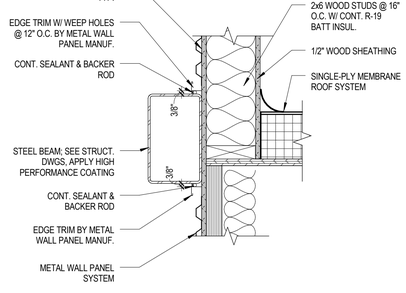
A5 AE541 CANOPY DETAIL
SCALE 1 1/2" = 1'-0"



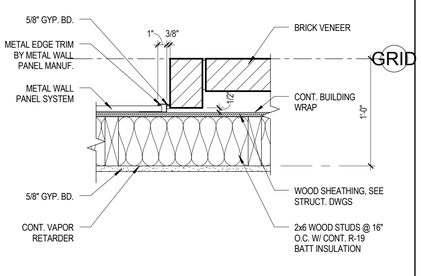
A4 AE541 CANOPY DETAIL
SCALE 1 1/2" = 1'-0"



A3 AE541 CANOPY DETAIL
SCALE 1 1/2" = 1'-0"



A2 AE541 CANOPY DETAIL
SCALE 1 1/2" = 1'-0"



A1 AE541 WALL DETAIL
SCALE 1 1/2" = 1'-0"

CONSTRUCTION DOCUMENTS

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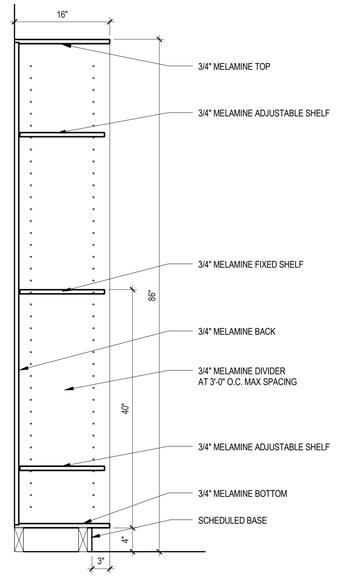
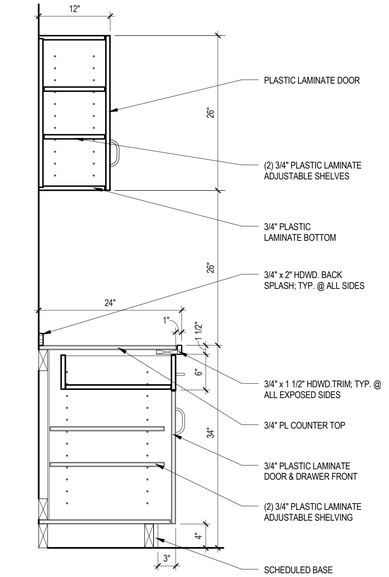
DATE/REVISION	PROJECT #
11-24-2010	10019

BUILDING DETAILS

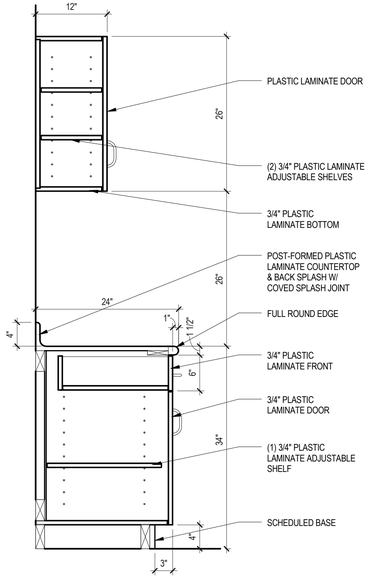
AE541



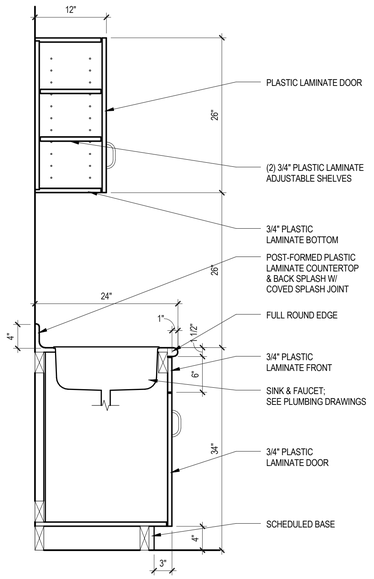
C2 AE571 CABINET SECTION
SCALE 1" = 1'-0"



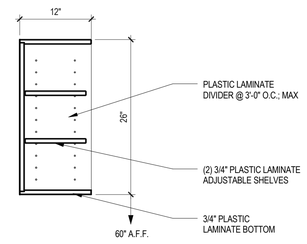
C1 AE571 CABINET SECTION
SCALE 1" = 1'-0"



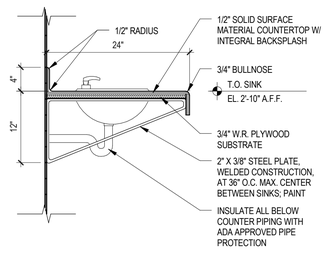
A3 AE571 CABINET SECTION
SCALE 1" = 1'-0"



A2 AE571 CABINET SECTION
SCALE 1" = 1'-0"



B1 AE571 CABINET SECTION
SCALE 1" = 1'-0"



A1 AE571 LAVATORY SECTION
SCALE 1" = 1'-0"

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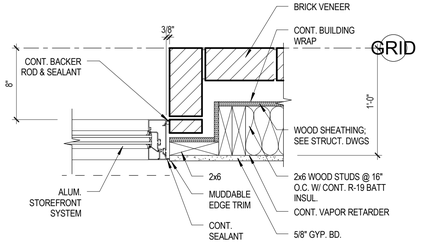
11-24-2010	10019

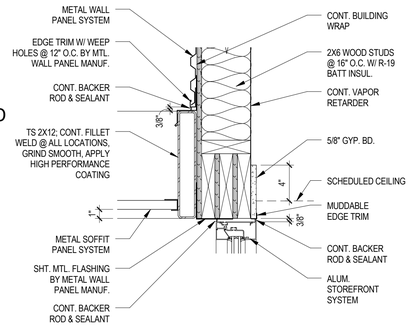
MILLWORK SECTION DETAILS

AE571



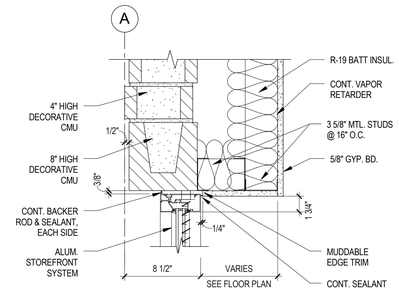
D4 AE591 ALUM. STOREFRONT JAMB DETAIL

SCALE 1 1/2" = 1'-0"



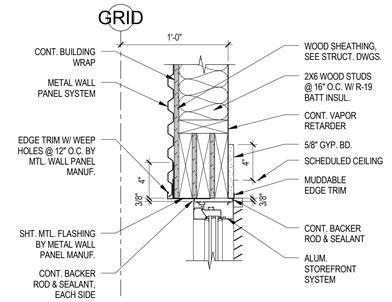
D3 AE591 STOREFRONT HEAD DETAIL & CANOPY

SCALE 1 1/2" = 1'-0"



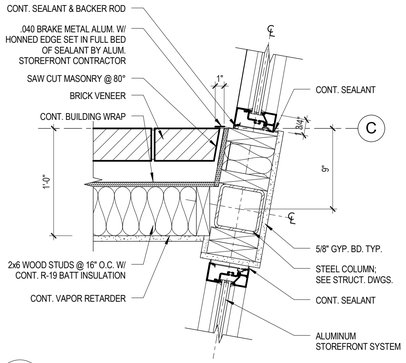
D2 AE591 WINDOW HEAD

SCALE 1 1/2" = 1'-0"



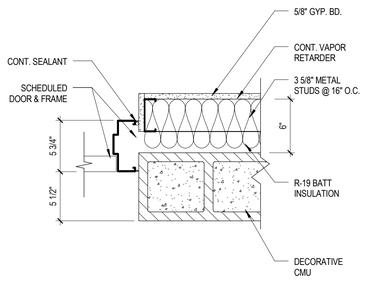
D1 AE591 WINDOW HEAD

SCALE 1 1/2" = 1'-0"



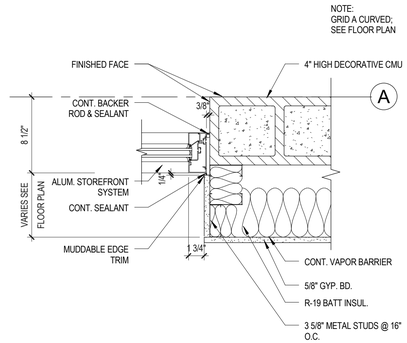
C5 AE591 STOREFRONT JAMB DETAIL

SCALE 1 1/2" = 1'-0"



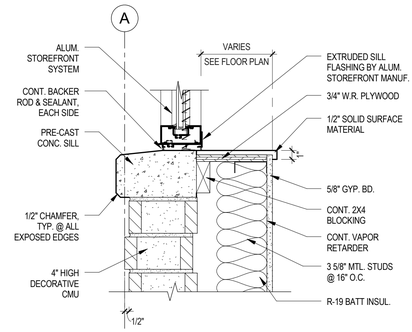
C4 AE591 HM FRAME JAMB DETAIL(HEAD SIM.)

SCALE 1 1/2" = 1'-0"



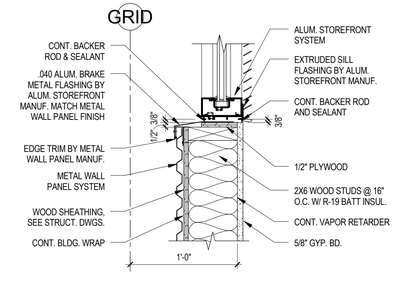
C3 AE591 STOREFRONT JAMB DETAIL

SCALE 1 1/2" = 1'-0"



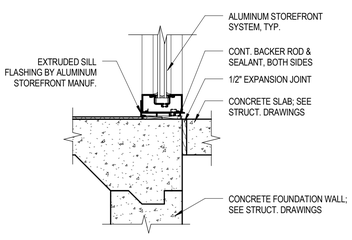
C2 AE591 WINDOW SILL

SCALE 1 1/2" = 1'-0"



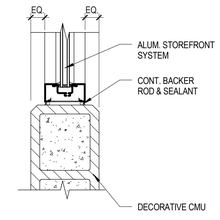
C1 AE591 WINDOW SILL

SCALE 1 1/2" = 1'-0"



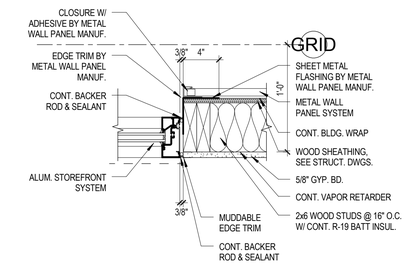
B5 AE591 STOREFRONT SILL @ FLOOR

SCALE 1 1/2" = 1'-0"



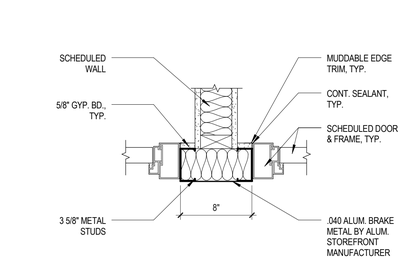
B4 AE591 INTERIOR STOREFRONT SILL DETAIL(HEAD & JAMB SIM.)

SCALE 1 1/2" = 1'-0"



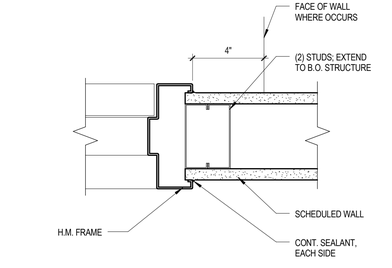
B3 AE591 STOREFRONT JAMB DETAIL

SCALE 1 1/2" = 1'-0"



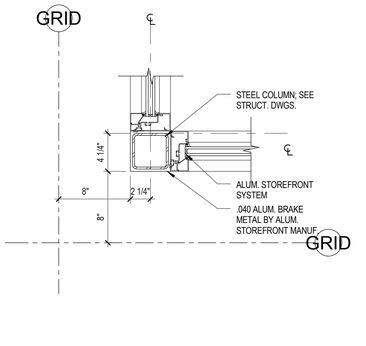
B2 AE591 INTERIOR STOREFRONT JAMB DETAIL

SCALE 1 1/2" = 1'-0"



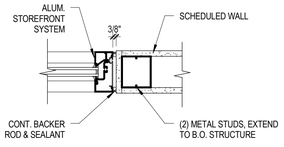
B1 AE591 INTERIOR H.M. DOOR JAMB

SCALE 3" = 1'-0"



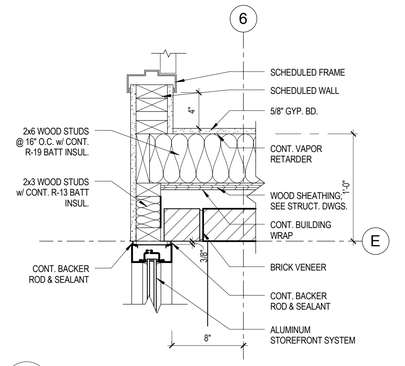
A5 AE591 STOREFRONT JAMB DETAIL

SCALE 1 1/2" = 1'-0"



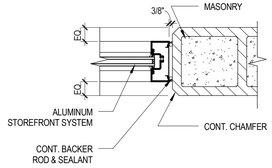
A4 AE591 INTERIOR STOREFRONT JAMB DETAIL(HEAD & SILL SIM.)

SCALE 1 1/2" = 1'-0"



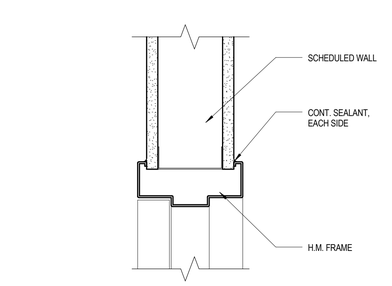
A3 AE591 STOREFRONT JAMB DETAIL

SCALE 1 1/2" = 1'-0"



A2 AE591 INTERIOR STOREFRONT JAMB (HEAD SIM.)

SCALE 1 1/2" = 1'-0"



A1 AE591 INTERIOR H.M. DOOR HEAD

SCALE 3" = 1'-0"

CONSTRUCTION DOCUMENTS

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DOOR & WINDOW DETAILS

AE591

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	BASE	WALL N	WALL E	WALL S	WALL W	NOTES
101	VESTIBULE	F6	B4	W1	W1	W1	W1	
102	LOBBY	F6	B1	W1	W1	W1	W1	1
103	MENS RESTROOM	F3	B3	W2	W2	W2	W2	
104	JANITOR	F4	B2	W1	W1	W1	W1	
105	WOMENS RESTROOM	F3	B3	W2	W2	W2	W2	
106	MECHANICAL ROOM	F4	B2	W1	W1	W1	W1	
107	ELECTRICAL ROOM	F2	B2	W1	W1	W1	W1	
108	COMMUNICATIONS	F2	B2	W1	W1	W1	W1	
109	STAFF RESTROOM	F3	B3	W2	W2	W2	W2	
110	HALL	F1	B2	W1	W1	W1	W1	
111	BREAKROOM	F6	B1	W1	W1	W1	W1	
112	TRAINING ROOM	F1	B2	W1	W1	W1	W1	
113	STORAGE	F1	B2	W1	W1	W1	W1	
114	STORAGE	F1	B2	W1	W1	W1	W1	
115	JANITOR	F4	B2	W1	W1	W1	W1	
116	STAFF RESTROOM	F3	B3	W2	W2	W2	W2	
117	TESTING	F5	B1	W1	W1	W1	W1	1
118	QUEUING	F5	B1	W1	W1	W1	W1	1
119	SERVICE AREA	F5	B1	W1	W1	W1	W3	1
120	SKILLS TEST	F1	B2	W1	W3	W1	W1	1
121	AREA MANAGER	F1	B2	W1	W3	W1	W1	1
122	ACCOUNTING	F1	B2	W1	W3	W1	W1	1
123	OFFICE SPECIALIST	F1	B2	W1	W3	W1	W1	1
124	ASSISTANT SUPERVISOR	F1	B2	W1	W3	W1	W1	1
125	COPY/WORK ROOM	F1	B2	W1	W3	W1	W1	1
126	SUPERVISOR	F1	B2	W1	W1	W1/W3	W1/W3	1
127	HEARING	F1	B2	W1	W1	W3	W1	1
128	HEARING	F1	B2	W1	W1	W3	W1	1
129	FIRE MARSHAL	F1	B2	W1	W1	W3	W1	1
130	HALL	F1	B2	W3	W1	W1	W3	1

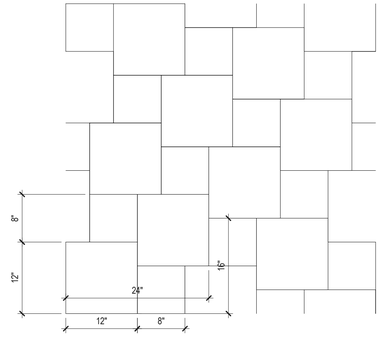
1. EXPOSED MASONRY WALLS DO NOT RECEIVE PAINT

DOOR AND FRAME SCHEDULE

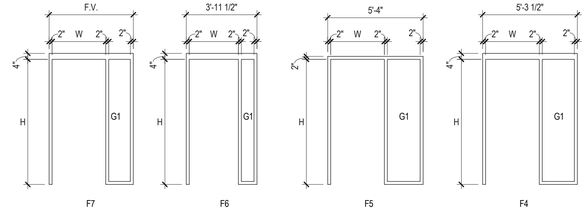
DOOR	DOOR SIZE WIDTH	DOOR SIZE HEIGHT	DOOR TYPE	DOOR MATL	DOOR FINISH	DOOR GLAZING	FRAME TYPE	FRAME MATL	FRAME FINISH	FRAME DETAILS (AE591) HEAD	FRAME DETAILS (AE591) JAMB	ASSEMBLY FIRE RATING	NOTES
101A	(2)3'-0"	8'-0"	D2	AL	--	G3	--	AL	--	--	--	--	1
101B	(2)3'-0"	8'-0"	D2	AL	--	G1	--	AL	--	--	--	--	1
102A	(2)3'-0"	7'-0"	D2	AL	--	G1	--	AL	--	--	--	--	1
103A	3'-0"	7'-0"	D1	WD	--	--	F1	HM	PAINT	A1	B1	--	--
104A	3'-0"	7'-0"	D1	WD	--	--	F1	HM	PAINT	A1	B1	--	--
105A	3'-0"	7'-0"	D1	WD	--	--	F1	HM	PAINT	A1	B1	--	--
106A	3'-0"	7'-0"	D1	WD	--	--	F1	HM	PAINT	A1	B1	--	--
107A	3'-0"	7'-0"	D1	WD	--	--	F1	HM	PAINT	A1	B1	--	--
108A	3'-0"	7'-0"	D1	WD	--	--	F1	HM	PAINT	A1	B1	--	--
109A	3'-0"	7'-0"	D1	WD	--	--	F1	HM	PAINT	A1	B1	--	--
110A	3'-0"	8'-0"	D2	AL	--	G3	--	AL	--	--	--	--	1
110B	3'-0"	8'-0"	D2	AL	--	G3	--	AL	--	--	--	--	1
111A	3'-0"	7'-0"	D1	WD	--	--	F5	HM	PAINT	A1	B1	--	--
112A	3'-0"	7'-0"	D1	WD	--	--	F5	HM	PAINT	A1	B1	--	--
112B	3'-0"	7'-0"	D1	WD	--	--	F5	HM	PAINT	A1	B1	--	--
113A	6'-0"	7'-0"	D1	WD	--	--	F2	HM	PAINT	A1	B1	--	--
114A	6'-0"	7'-0"	D1	WD	--	--	F2	HM	PAINT	A1	B1	--	--
115A	3'-0"	7'-0"	D1	WD	--	--	F1	HM	PAINT	--	--	--	--
116A	3'-0"	7'-0"	D1	WD	--	--	F1	HM	PAINT	A1	B1	--	--
119A	3'-0"	7'-0"	D1	HM	PAINT	--	F3	HM	PAINT	C4	C4	--	--
119B	3'-0"	7'-0"	D2	AL	--	G1	--	AL	--	--	--	--	1
119C	3'-0"	7'-0"	D1	WD	--	--	F3	HM	PAINT	C4	C4	--	--
119D	3'-0"	7'-0"	D1	HM	PAINT	--	F3	HM	PAINT	C4	C4	--	--
119E	3'-0"	7'-0"	D1	WD	--	--	F1	HM	PAINT	A1	B1	--	--
119F	3'-0"	7'-0"	D1	WD	--	--	F1	HM	PAINT	A1	B1	--	--
120A	3'-0"	7'-0"	D1	WD	--	--	F4	HM	PAINT	A2	A2	--	--
120B	3'-0"	8'-0"	D2	AL	--	G3	--	AL	--	--	--	--	1
121A	3'-0"	7'-0"	D1	WD	--	--	F4	HM	PAINT	A2	A2	--	--
122A	3'-0"	7'-0"	D1	WD	--	--	F4	HM	PAINT	A2	A2	--	--
123A	3'-0"	7'-0"	D1	WD	--	--	F4	HM	PAINT	A2	A2	--	--
124A	3'-0"	7'-0"	D1	WD	--	--	F4	HM	PAINT	A2	A2	--	--
125A	3'-0"	7'-0"	D1	WD	--	--	F6	HM	PAINT	A2	A2	--	--
126A	3'-0"	7'-0"	D1	WD	--	--	F7	HM	PAINT	A1	C3/AE521	--	--
127A	3'-0"	7'-0"	D1	WD	--	--	F4	HM	PAINT	A2	A2	--	--
128A	3'-0"	7'-0"	D1	WD	--	--	F4	HM	PAINT	A2	A2	--	--
129A	3'-0"	7'-0"	D1	WD	--	--	F4	HM	PAINT	A2	A2	--	--
130A	3'-0"	7'-0"	D1	WD	--	--	F1	HM	PAINT	A1	B1	--	--
130B	3'-0"	7'-0"	D1	WD	--	--	--	AL	--	--	--	--	1

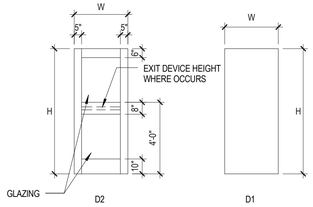
NOTES:

1. ALUMINUM STOREFRONT SYSTEM

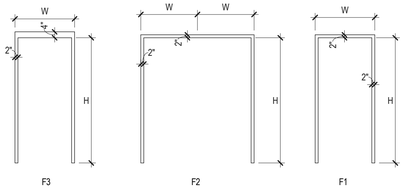


B1 / AE601 PINWHEEL TILE PATTERN
SCALE 1" = 1'-0"





DOOR TYPES



FRAME TYPES

ELECTRICAL ROOM
REQUIRED @ DOOR(S)
107A
3" X 9"

NO ADMITANCE
REQUIRED @ DOOR(S)
119C, 119E, 119F &104A
3" X 9"

CONFERENCE/ TRAINING
REQUIRED @ DOOR(S)
112A & 112B
3" X 9"

COMMUNICATIONS ROOM
REQUIRED @ DOOR(S)
108A
3" X 9"

BREAK ROOM
REQUIRED @ DOOR(S)
111A
3" X 9"

REMOVABLE LABEL

REQUIRED @ DOOR(S)
120A, 121A, 122A, 123A, 124A, 125A,126A, 127A, 128A, 129A
3" X 9"

STORAGE ROOM
REQUIRED @ DOOR(S)
113A & 114A
3" X 9"

MEN
REQUIRED @ DOOR(S)
109A & 103A
6" X 6"

WOMEN
REQUIRED @ DOOR(S)
116A & 105A
6" X 9"

A4 / AE601 SIGN SCHEDULE
SCALE 1 1/2" = 1'-0"

GENERAL NOTES:

1. H.M. DOORS & FRAMES TO BE PAINTED DIFFERENT COLOR THAN WALLS
2. DO NOT PAINT INTERIOR EXPOSED MASONRY WALLS

GLAZING SCHEDULE

G1	1/4" CLEAR - TEMPERED
G2	1/4" CLEAR
G3	1" INSULATED - TEMPERED
G4	1" INSULATED
G5	1" INSULATED SPANDREL GLASS - TEMPERED

ROOM FINISH SCHEDULE LEGEND:

FLOOR FINISH

F1	CARPET TILE
F2	VCT
F3	2" X 2" CERAMIC MOSAIC; SEAL GROUT
F4	SEALED CONCRETE
F5	12" X 12" & 8" X 8" PORCELAIN TILE; SEE B1/AE601 FOR PATTERN SEAL GROUT
F6	12" X 12" PORCELAIN TILE; SEAL GROUT

BASE FINISH

B1	6" X 8" COVED PORCELAIN TILE BASE
B2	4" RUBBER BASE
B3	4" X 4" COVED WALL TILE BASE
B4	NO BASE

WALL FINISH

W1	PAINTED SURFACE
W2	6" X 6" CERAMIC WALL TILE; FULL HEIGHT OF WALL
W3	EXPOSED MASONRY; DO NOT PAINT

CONSTRUCTION DOCUMENTS

DLD - OGDEN

SOUTH OGDEN, UTAH

JRCA
ARCHITECTS
577 South 200 East
Salt Lake City, Utah 84111
(801) 533-2100 fax: 533-2101 jrcadesign.com

DATE/REVISION	PROJECT #
11-24-2010	10019

DOOR & FRAME TYPES / SCHEDULES

AE601

GENERAL STRUCTURAL NOTES

GENERAL

1. The structural notes are intended to complement the project specifications. Specific notes and details in the drawings shall govern over the structural notes and typical details.
2. Typical details and sections shall apply where specific details are not shown.
3. The contractor shall verify all site conditions and dimensions. If actual conditions differ from those shown in the contract drawings, the contractor shall immediately notify the architect/engineer before proceeding with the fabrication or construction of any effected elements.
4. Omissions or conflicts between the contract drawings and/or specifications shall be brought to the attention of the architect/engineer before proceeding with any work involved. In case of conflict, follow the most stringent requirement as directed by the architect/engineer at no additional cost to the owner.
5. The contractor shall submit a written request to the architect/engineer before proceeding with any changes, substitutions or modifications. Any work done by the contractor before receiving written approval will be at the contractor's risk.
6. The contractor shall coordinate with all trades any items that are to be integrated into the structural system such as openings, penetrations, mechanical and electrical equipment, etc. Sizes and locations of mechanical and other equipment that differs from those shown on the contract drawings shall be reported to the architect/engineer.
7. The contractor shall provide adequate shoring and bracing as required for his method of erection. Shoring and bracing shall remain in place until final connections for the permanent members are completed. The building shall not be considered stable until all connections are completed. Walls shall not be considered self-supporting and shall be braced until the roof system is completed.
8. The contractor shall not cut or core any holes in masonry or concrete walls without prior review by the architect/engineer.
9. Site observations by BHB Consulting Engineers, P.C.'s field representative shall not be construed as approval of construction procedures nor special inspection.
10. Detailing and shop drawing production for structural elements will require information (including dimensions) contained in the architectural, structural and/or other consultants' drawings. The structural drawings shall be used in conjunction with the architectural and other consultant's drawings. Some dimensions and elements such as elevations, depressions, slopes, mechanical housekeeping pads, etc. are not shown in the structural drawings. All dimensions shown on structural drawings shall be verified by contractor with architectural, mechanical and electrical drawings.
11. Review of shop drawing submittals by BHB Consulting Engineers, P.C. is for general compliance only and is not intended for approval. The shop drawing review shall not relieve the contractor from the responsibility of completing the project according to the contract documents.
12. Shop drawings made from reproductions of the contract drawings will be rejected unless the contractor signs a release agreement prior to the shop drawings being reviewed.
13. Only an authorized representative of BHB Consulting Engineers, P.C. may make changes to these contract drawings. BHB Consulting Engineers, P.C. shall not be held responsible or liable for any claims arising directly or indirectly from changes made without written authorization by an authorized representative of BHB Consulting Engineers, P.C.

BASIS OF DESIGN

1. Governing Building Code — International Building Code 2009
2. Roof Snow Load
   a. Ground Snow Load — P_g = 46 psf
   b. Snow Importance Factor — I_s = 1.0
   c. Snow Exposure Coefficient — C_e = 1.0
   d. Thermal Exposure Coefficient — C_t = 1.0
   e. Roof Snow Load — $P_f = 0.7 * C_e * C_t * I_s * P_g$ = 32 psf plus Snow Drift
3. Seismic Loads
   a. Occupancy Category — II
   b. Seismic Importance Factor, I_e — 1.0
   c. Seismic Design Category — D
   d. Mapped Spectral Acceleration
      S_S = 1.35g S_1 = 0.568g
   e. Soil Site Class — D
   f. Soil Site Coefficients
      F_a =1.0 F_v = 1.5
   g. 5% Damped Design Spectral Response Acceleration
      $S_{DS} = 2/3 * F_a * S_S$ = .90g $S_{D1} = 2/3 * F_V * S_1$ = 0.568g
   h. Basic Seismic-Force-Resisting System — Special Reinforced Masonry Walls and Light Framed Walls with Wood Sheathing
   i. Response Modification Coefficient — R = 5.0
   j. System Over-strength Factor — 2.0
   k. Deflection Amplification Factor — 3.5
   l. Fundamental Building Period — T = 0.99 seconds
   m. Seismic Response Coefficient — $C_s = S_{DS} * I_e / R$
   n. W — Dead Loads of Structure
   o. Base Shear — $V = C_S * W$ = 0.18 W (Strength Design)
   p. Analysis Procedure — Equivalent Lateral Force (Static)
4. Wind Loads
   a. Wind Velocity (3 Second Gust) — 90 mph
   b. Exposure Type — C
   c. Wind Importance Factor, I_W — 1.00
   d. Internal Pressure Coefficient, GC_p — +/-0.18
   e. Topographic Factor, K_{zt} — 1.0
   f. Components and Cladding Wind Force Table (psf)

Component Elevation above grade	Effective Wind Area for Component (sq ft.)				
	10 sq ft.	20 sq ft.	50 sq ft.	100 sq ft.	500 sq ft.
0-15 ft	23.60	22.02	19.97	18.27	14.64
20 ft	25.16	23.48	21.29	19.48	15.61

FOUNDATION

1. Soils Report by Professional Services Industries, Inc.
   Dated September 22, 2010.
2. Soil Bearing Pressure: 2500 psf.
3. Frost Protection: 30 inches minimum to bottom of footing.
   Contractor shall field verify that the footing elevations and final grades indicated on the plans will provide the minimum frost protection. The contractor shall notify the architect/engineer if there are any locations where the minimum frost protection might not be achieved prior to placing concrete.
4. Lateral Soil Pressure Fluid Equivalent Density.
   a. Active .... 35 pcf (retaining walls)
   b. At Rest .... 55 pcf (rigid foundation walls)
   c. Passive .... 300 pcf
5. Coefficient of Friction 0.4

EARTHWORK

1. Soil shall be consolidated using rammed aggregate/ rock columns. Consolidated soils shall extend 7'-0" beyond the extent of the building.
2. Consult the project specifications and soils report for further earthwork requirements.

CONCRETE

1. Materials, unless noted otherwise:
   a. Normal weight aggregates — ASTM C 33
   b. Reinforcing Steel — ASTM 615 Grade 60 (Fy = 60 ksi)
      Use Grade 40 (Fy = 40 ksi) for field bent dowels with spacings indicated reduced by 1/3.
   c. Deformed Bar Anchors (DBA) — ASTM A496
   d. Headed Stud Anchors (HSA) — ASTM A108
   e. Anchor Rods — ASTM F1554, Grade 36, with ASTM A563 heavy hex nuts and hardened washers Grade A
   f. Admixtures:
      i. Air-entraining admixtures comply with ASTM C 260 (when used).
      ii Calcium chloride shall not be added to the concrete mix.
   g. Type I/II cement complying with ASTM C-150 shall be used for all concrete.
   h. Blended cement Type GU complying with ASTM C1157
   i. Fly Ash - ASTM C618, Class F – 20% maximum cementitious content
   j. The water/cement ratios shall meet the requirements of Table 4.3.1 of ACI 318.
   k. Provide air entraining as recommended by Table 4.4.1 of ACI 318.
   l. No aluminum conduit or product containing aluminum or any other material injurious to concrete shall be embedded in concrete.
2. Compressive strengths of concrete at 28 days shall be as follows:
   a. Footings
      Strength .... 4,500 psi
      Classification .... F2, SO, PO, CO
   b. Foundation Walls
      Strength .... 4,500 psi
      Classification .... F2, SO, P1, C1
   c. Interior Slabs on Grade
      Strength .... 3,000 psi
      Classification .... FO, SO, PO, CO
   d. All Site Concrete
      Strength .... 5,000 psi
      Classification .... F3, SO, P1, C2
3. Only one grade or type of concrete shall be poured on the site at any given time.
4. The contractor shall be responsible for the design, detailing, care, placement and removal of all formwork and shores.
   a. Supporting forms and shoring shall not be removed until structural members have acquired sufficient strength to safely support their own weight and any construction load to which they may be subjected. In no case, however, shall forms and shoring be removed in less than 24 hours after concrete placement.
5. Reinforcement shall have the following concrete cover:
   Cast-in-place Concrete: .... Clear Cover
   a. Cast against and permanently exposed to earth .... 3"
   b. Formed concrete exposed to earth or weather:
      #6 thru #18 bars .... 2"
      #5 and smaller bars .... 1-1/2"
   c. Concrete not exposed to weather or in contact with ground:
      Slabs, Walls, Joists; #11 bars and smaller .... 3/4"
      Beams, Columns: Primary Reinf., Ties, Stirrups, Spirals .... 1-1/2"
6. Construction Joints, Control Joints and Contraction Joints:
   a. Provide a formed and beveled 2 x 4 x continuous keyway in all horizontal and vertical construction joints including between top of footing and foundation walls, unless noted otherwise. In addition, all joints shall be intentionally roughened to a full amplitude of approximately 1/4 inch.
   b. Control joints shall be installed in slabs on grade so the length to width ratio of the slab is no more than 1.25:1. Control joints shall be completed within 12 hours of concrete placement. Control joints may be installed by:
      i. Saw cut a depth of 1/4 the thickness of the slab
      ii. Tooled joints a depth of 1/4 the thickness of the slab
   c. Install construction or control joints in slabs on grade at a spacing not to exceed 30 times the slab thickness in any direction, unless noted otherwise. Construction joints shall not exceed a distance of 125'-0" o.c. in any direction.
7. Construction
   a. Use chairs or other support devices recommended by the CRSI to support and tie reinforcement bars prior to placing concrete. Reinforcing steel for slabs on grade shall be adequately supported on precast concrete units. Lifting the reinforcing off the grade during placement of concrete is not permitted.
   b. Concrete to be mechanically consolidated during placement per ACI standards.
   c. Contractor shall coordinate placement of all openings, curbs, dowels, sleeves, conduits, bolts, inserts and other embedded items prior to concrete placement.
   d. All embeds and dowels shall be securely tied to formwork or to adjacent reinforcing prior to the placement of concrete.
   e. No pipes, ducts, sleeves, etc shall be placed in structural concrete unless specifically detailed or approved by the structural engineer. Penetrations through walls when approved shall be built into the wall prior to concrete placement. Penetrations will not be allowed in footings or grade beams unless detailed. Piping shall be routed around these elements and footings stepped to avoid piping.
   f. Reinforcing Bars shall not be welded. Do not substitute reinforcing bars for DBAs or HSAs.
8. Detailing:
   a. Lap splice lengths shall be detailed to comply with the "Concrete Reinforcing Bar Lap Splice Schedule" on sheet S601. Splices may be made with mechanical splices capable of 125% tension capacity of the bar being spliced. Mechanical splices shall be the positive connecting type coupler and shall meet all International Building Code requirements. Use "Cadweld", "Lenton" Standard Couplers, "Bar-Lock" or equal with internal protector. If mechanical splices are used, splices or couplers on adjacent bars shall be staggered a minimum of 24" apart along the longitudinal axis of the reinforcing bars.
   b. At joints provide reinforcing dowels to match the member reinforcing, unless noted otherwise.
   c. At all discontinuous control or construction slab on grade joints, provide 2 - #4 x 48 inches.
   d. Provide corner bars at intersecting wall corners using the same bar size and spacing as the horizontal wall reinforcing.
   e. All vertical reinforcing shall be doweled to footings, or to the structure below with the same size and spacing as the vertical reinforcing for the element above. Dowels extending into footings shall terminate with a 90 degree standard hook and shall extend to within 4" of the bottom of the footing. Footing dowels (#8 bars and smaller) with hooks need not extend more than 20" into footings.
   f. Horizontal wall reinforcing shall terminate at ends of walls and openings into the far end of the jamb column with a 90-degree standard hook plus a 6 bar diameter extension. Horizontal wall reinforcing shall be continuous through construction and control joints.

POST-INSTALLED ANCHORS

1. EPOXY ANCHORS
   a. For concrete, the epoxy shall be HIT RE 500-SD (ICC-ESR-2322) by Hilti Corporation, HIT_HY 150 MAX-SD (ICC-ESR-3013) by Hilti Corporation, Epcon G5 (ICC-ESR-1137) by ITW Redhead, Powers PE1000 + (ICC-ESR-2583) by Powers Fasteners Inc, or SET-XP (ICC-ESR-2508) by Simpson Strong Tie. Epcon G5 shall not be used in cracked concrete or for seismic applications.
   b. For grouted masonry, the epoxy shall be HIT HY 150 MAX (ICC-ESR-1967) by Hilti Corporation, SET (ICC-ESR-1772) by Simpson Strong, or CIA GEL (ICC-ESR-1702) by USP.
   c. Follow all of the manufacturer's recommendations and ICC-ESR for epoxy installation.
   d. Alternative epoxies may be used if an ICC-ESR approval for use in cracked concrete is submitted to the structural engineer prior to use.
2. MECHANICAL ANCHORS
   a. For concrete, the mechanical anchor shall be Kwik Bolt TZ-CS (ICC-ESR-1917) by Hilti Corporation, Strong-Bolt (ESR-1771) by Simpson Strong Tie Inc., or Power-Stud+ SD1 (ICC-ESR-2818) by Powers Fasteners Inc.
   b. For grouted masonry, the mechanical anchor shall be Kwik Bolt 3 (ICC-ESR-1385) by Hilti Corporation, Wedge-All (ICC-ESR-1396) by Simpson Strong Tie Inc. or Power-Stud+ SD1 (ICC-ESR-2966) by Powers Fasteners Inc.
   c. Follow all of the manufacturer's recommendations and ICC-ESR for mechanical anchor installation.
   d. Alternative mechanical anchors may be used if an ICC-ESR approval for use in cracked concrete is submitted to the structural engineer prior to use.

MASONRY

1. Materials, unless noted otherwise:
   a. Concrete Masonry Units (CMU): Lightweight Grade N, Type 1 (minimum unit strength of 2800 psi). f'_m = 2000 psi
   b. Mortar: Use Type "S" 1800 psi minimum compressive
   c. Grout shall attain a minimum compressive strength of 2,800 psi at 28 days.
   d. Reinforcing Steel — ASTM 615 Grade 60 (Fy = 60 ksi)
   e. Deformed Bar Anchors (DBA) — ASTM A496
   f. Headed Stud Anchors (HSA) — ASTM A108
   g. Anchor Rods — ASTM F1554, Grade 36,with ASTM A563 heavy hex nuts and ASTM F436 hardened washers
2. Reinforcement shall have the following cover:
   a. Reinforcement shall have a minimum coverage of one bar diameter over all the bars, but not less than 3/4". When masonry is exposed to soil, minimum coverage shall be 1.5".
3. Construction Requirements:
   a. Masonry coursing shall be coordinated with the architectural drawings.
   b. All units shall be laid with full mortar beds on the face shells. All head joints shall be filled solidly with mortar for a distance in from the face of the units not less than the thickness of the longitudinal face shells. Cells which are to be grouted shall have full head joints.
   c. Masonry walls, beams and columns shall be constructed with running bond, unless noted otherwise.
   d. All cells containing reinforcement, embeds, anchor bolts, etc. shall be filled solid with grout. Grout shall be placed by mechanical vibration during placing and revibrated after excess moisture has been absorbed but before workability is lost. Rodding of grout is not allowed.
   e. Where walls are not grouted solid, each grout pour shall terminate flush with the top of the uppermost unit except at cells with vertical reinforcing where the grout shall be 1-1/2 inches below top of unit to provide construction key.
   f. Grout pours shall be limited to 4'-0" unless written approval is obtained from the engineer of record.
   g. All walls below grade shall be grouted solid.
   h. Vertical cells to be filled with grout shall have vertical alignment sufficient to maintain a clear, unobstructed vertical cell measuring not less than 2 inches by 3 inches. All steel reinforcement shall be secured against displacement prior to grouting by wire positioners or other suitable devices at intervals not exceeding 200 bar diameters or 10 feet maximum, or at bar splice locations. Vertical reinforcing shall be located at the center of the wall unless noted otherwise
   i. Reinforcing Bars shall not be welded. Do not substitute reinforcing bars for DBAs or HSAs.
   j. Control Joints: Spacing shall not exceed 40'-0". See architectural drawings for locations.
   k. Grout all beam and joist pockets solid after installation of beams and joists.
   l. Embed channels and plates shall be placed so as to create a flush surface with the face of the wall.
   m. Anchor bolts and headed stud anchors shall be set in a grouted cell. Anchor bolts and headed stud anchors shall have 1" grout surrounding the shank at its penetration. Grout shall be flush with the face or top of the masonry.
4. Detailing Requirement
   a. Lap all masonry reinforcing per "Masonry Reinforcing Lap Schedule" on sheet S602.
   b. All vertical reinforcing shall be doweled to the foundation wall, footing (structure below) and to the structure below with the same size dowel, spacing (and in the same core) as the vertical wall reinforcing above.
   c. Corner Bars: Horizontal reinforcement shall be continuous at all corners and at intersecting walls. Provide corner bars with the required lap splice length.
   d. Wall Openings: For unscheduled openings wider than 24 inches, provide reinforcing on all sides per detail 7/S501. Also, for all scheduled openings, provide horizontal bar at bottom of opening per detail 7/S501. Vertical bars shall extend from floor level below to the floor, or roof level above. Horizontal bars for all openings shall extend a minimum of 48 bar diameters beyond the corners of the opening. Where a 48 bar diameter extension is not possible, extend bars as far beyond the opening as possible and terminate the bar(s) with a 90 degree standard ACI hook.
   e. Horizontal wall reinforcing shall be continuous through joining concrete walls, masonry walls, columns, and pilasters. Provide a key between the wall and the column or pilaster. Horizontal wall reinforcing shall be placed inside the column vertical reinforcing.
   f. Horizontal wall reinforcing shall terminate with a hook at edge of openings and at each side of control joints except at floor and roof levels, lintels, beams and at top of parapets. See details 10/S501.
   g. All masonry column ties shall terminate with 135 degree hooks plus a 6 bar diameter extension (4" minimum)

MASONRY VENEER

1. Masonry veneer shall be attached to wood stud walls with *Dur-O-Wal* D/A 213 seismic veneer anchors or *Hohmann & Barnard* DW-10 or DW-10HS seismic veneer anchors (or equal) spaced at 16" o.c. Veneer anchors shall be attached to studs with #10 corrosion resistant self-drilling screws. Attach the veneer to the anchors with *Dur-O-Wal* Seismic Steel Pintles or *Hohmann & Barnard* 3/16" Ø Byna-Tie with Seismiclips (or equal) spaced at a maximum of 16" o.c. in both directions. Anchor ties shall engage to a galvanized No. 9 gauge horizontal joint reinforcement wire in the veneer, which shall be continuous and shall be placed at 16" o.c. maximum at the center of the veneer.
2. Other methods of attachment may be used after written acceptance by the architect and structural engineer.
3. Steel Lintels: Provide steel angle lintels at all openings through the masonry veneer. Provide one inch of bearing for each foot of width of opening, with a minimum bearing of six inches. See the "Steel Angle Lintel Schedule" on sheet S-602 for size.
4. Steel lintel angles shall be galvanized at all exterior conditions where exposed to weather.

STRUCTURAL STEEL

1. Material:
   a. Wide Flanges Section — ASTM A992 (50 ksi)
   b. Other shapes & Plates — ASTM A36 (36 ksi)
   c. Standard (Schedule 40) Pipe — ASTM A53 (35 ksi) Grade B
   d. Square or Rectangular HSS — ASTM A500 (46 ksi) Grade B
   e. Deformed Bar Anchors (DBA) — ASTM A496
   f. Headed Stud Anchors (HSA) — ASTM A108
   g. Anchor Rods — ASTM F1554, Grade 36, with ASTM A563 heavy hex nuts and ASTM F436 hardened washers Grade A
   h. Bolted Connections: — ASTM A325 with ASTM A563 nuts and ASTM F436 hardened washers.
2. Fabrication and construction shall comply with the latest edition of the following Codes and Standards:
   a. American Institute of Steel Construction (AISC), "Specification for the Design, Fabrication and Erection of Structural Steel for Buildings," with "Commentary".
   b. AISC "Code of Standard Practice" excluding the following: Section 3.4, Section 4.4, Section 4.4.1,
   c. AISC "Specification for Structural Joints Using ASTM A325 or A490 Bolts"
   d. American Welding Society (AWS), Structural Welding Code (specific items do not apply when they conflict with the AISC requirements).
   e. AISC "Seismic Provision for Structural Steel Buildings"
3. Welding
   a. All welding and cutting shall be performed by AWS certified welders.
   b. Use E-70 XX or as noted otherwise. E60 XX may be used for welding steel floor and roof decks.
   c. All intersecting steel shapes which are not bolted shall be connected by a fillet weld all around, unless noted otherwise. Where fillet weld sizes are not shown they shall be 1/16" less than the thinnest of the connected parts for thicknesses 1/4" and larger. Fillet welds on plates less than 1/4" shall be of the same size as the thinnest of the connected part.
   d. Reinforcing Bars: Do not weld rebar. Do not substitute reinforcing bars for deformed bar anchors (DBAs), machine bolts, or headed stud anchors (HSAs).
   e. Do not weld anchor bolts, including "tack" welds.
   f. Headed Stud Anchors (HSAs) welding and deformed bar anchor welding shall conform to the manufacturer's specifications.
4. Bolted Connections:
   a. Use ASTM A325N bolts for steel to steel connections, as noted herein or as noted on the drawings. A325N bolts shall be used in connections for simple span framing and beam (or girder) to bearing plate connections. Tighten bolts to a snug tight condition
   b. Use hardened washers beneath the turned element of all bolts or nuts. Use hardened beveled washers, to compensate for the lack of parallelism, where the outer face of the bolted parts has a slope greater than one in twenty with respect to the plane normal to the bolt axis. At oversized holes hardened washers or plates shall conform with ASTM F-436 and shall completely cover the slot after installation.
   c. Where a steel to steel beam connection is not shown, provide a standard AISC framed connection for one half the total uniform load capacity of the beam for the span and steel specified.
   d. Bolts, nuts and washers shall not be reused.
5. Provide steel angle lintels at all openings through masonry veneer. See the "Veneer Lintel Schedule" on sheet S- 602 for size. Steel lintel angles shall be galvanized at all exterior conditions where exposed to weather.
6. Provide full-depth web-stiffener plates at each side of all beams at all bearing points. Stiffener plates shall be the thickness called out below unless noted otherwise and shall be welded both sides with fillet welds all around:

FLANGE WIDTH	STIFFENER THICKNESS	WELD SIZE
Less than 8 1/4"	1/4"	3/16"
8 1/4" to 12 1/4"	3/8"	1/4"
12 1/4" to 16 ½"	1/2"	5/16"
16 ½" to 20 ¾"	5/8"	3/8"

OPEN WEB STEEL JOISTS

1. All open web steel joist shall be fabricated and erected in accordance with the latest edition of Steel Joist Institute (SJI), "Standard Specifications and Code of Standard Practice".
2. At the completion of fabrication, the steel joist manufacturer shall submit to the building official a certificate of compliance in accordance with IBC Section 1704.2.2 stating if the work was performed in accordance with approved construction documents and with SJI standard specifications.
3. Joists with slopes greater than 1/2 inch per foot shall be designed to meet or exceed the load capacities, listed in the SJI load tables, of the joist sizes indicated on the framing plan, as if the joists or girders were installed level.
4. Provide special bearing ends to accommodate slopes from sloped joists, or sloped bearing conditions.
5. Modifications to any joist including holes through the top and bottom chords, without the written consent and direction from the manufacturer are not allowed.
6. Open web joist deflection shall be limited to L/240 for total loads and L/360 for live load, unless noted otherwise.
7. Joist bridging shown on plans is for schematic purposes only; actual size, quantity and location of bridging shall be determined by the joist supplier per SJI. Coordinate bridging locations to avoid interference with mechanical, electrical and fire protection equipment and skylights.

METAL DECKING

1. Steel deck shall comply with the latest requirements of the Steel Deck Institute.
2. All deck shall be 3-span continuous minimum. In areas where 3-span conditions are not possible, the contractor shall provide heavier gage deck as required to provide the equivalent loading of the deck under a three span condition.
3. Steel roof deck shall not be used to support loads from plumbing, HVAC ducts, light fixtures, architectural elements or equipment of any kind, unless specifically noted. Lightweight suspended acoustical ceilings with a total weight of 50 lbs per attachment may be hung from roof deck. The hangers shall be staggered to distribute the loads over multiple deck flutes.
4. All deck supporting members shall be dry before welding.
5. Clinch seams before welding interlocking seams.

Steel Roof Deck
   a. Steel roof deck shall be 1.1/2" deep X 18 gage minimum painted (galvanized G90 at canopy), type "B" wide rib deck with interlocking side seams with the following properties:
      18 Gage
      Minimum S ($in^3/_{ft}$) = 0.322
      Minimum I ($in^4/_{ft}$) = 0.296
   b. Minimum allowable deck diaphragm shear values shall be 500 plf for a 7'-0" deck span.
   c. Weld steel roof deck to supporting framing members with 3/4" diameter puddle welds at the following spacings (Closer spacing may be used to develop minimum shear requirements.):
      i. 6" o.c. to all supports perpendicular to deck corrugations (7 welds per 36" sheet).
      ii. 6" o.c. to all supports parallel to deck corrugations.
   d. Hilti or Pneutek power driven fasteners are acceptable as an alternative to welds provided the connection meets the diaphragm shear capacity given above. For Hilti call 800-879-8000 extension 6337 for connection information comparison. For Pneutek, call 800-431-8665. If Hilti or Pneutek power driven fasteners are used, the contractor shall submit Hilti's / Pneutek calculations to the Architect/Engineer for review. Also if Hilti of Pneutek power driven fasteners are used, a Hilti / Pneutek representative shall be present before the decking is installed to make sure the installer is properly trained in using the equipment. The Hilti / Pneutek representative shall also make a site visit the day after deck has been started to be installed to verify the power driven fasteners are being installed correctly.
   e. Attach interlocking seams with 1 1/2" long top seam welds at 24" o.c. maximum or with Verco PunchLok System at 24" o.c. maximum, with ASC Delta Grip System at 24" o.c. maximum or with Wheeling Gator-Seismic Shearloc at 24" o.c maximum. Closer spacing may be used to develop minimum shear requirements. A standard button punch can **not** be used in place of Verco PunchLok, DeltaGrip or Gator-Seismic Shearloc.
   f. Provide a 2-inch minimum bearing and a 4-inch lap at the splice points.

Steel Roof Deck at West Canopy
   d. Steel roof deck shall be 3" deep X 18 gage minimum galvanized G90, type "N" wide rib deck with interlocking side seams with the following properties:
      18 Gage
      Minimum S ($in^3/_{ft}$) = 0.731
      Minimum I ($in^4/_{ft}$) = 1.223
   e. Minimum allowable deck diaphragm shear values shall be 500 plf for a 7'-0" deck span.
   f. Weld steel roof deck to supporting framing members with 3/4" diameter puddle welds at the following spacings (Closer spacing may be used to develop minimum shear requirements.):
      iii. 6" o.c. to all supports perpendicular to deck corrugations (7 welds per 36" sheet).
      iv. 6" o.c. to all supports parallel to deck corrugations.
   d. Hilti or Pneutek power driven fasteners are acceptable as an alternative to welds provided the connection meets the diaphragm shear capacity given above. For Hilti call 800-879-8000 extension 6337 for connection information comparison. For Pneutek, call 800-431-8665. If Hilti or Pneutek power driven fasteners are used, the contractor shall submit Hilti's / Pneutek calculations to the Architect/Engineer for review. Also if Hilti of Pneutek power driven fasteners are used, a Hilti / Pneutek representative shall be present before the decking is installed to make sure the installer is properly trained in using the equipment. The Hilti / Pneutek representative shall also make a site visit the day after deck has been started to be installed to verify the power driven fasteners are being installed correctly.
   e. Attach interlocking seams with 1 1/2" long top seam welds at 24 o.c. maximum or with Verco PunchLok System at 24" o.c. maximum, with ASC Delta Grip System at 24"o.c. maximum or with Wheeling Gator-Seismic Shearloc at 24"o.c maximum. Closer spacing may be used to develop minimum shear requirements. A standard button punch can **not** be used in place of Verco PunchLok, DeltaGrip or Gator-Seismic Shearloc.
   g. Provide a 2-inch minimum bearing and a 4-inch lap at the splice points.

WOOD

1. Materials:
   a. Framing Lumber shall be # 2 Douglas Fir-Larch or better unless noted otherwise.
   b. Wood sheathing shall be interior grade with exterior glue, span index ratio, unless noted otherwise,
      24/0 — Walls (7/16 inch thick)
      48/24 — Roof (19/32 inch thick)
   c. Nails: Standard Common with the following properties:

Nail Size	Shank Diameter	Min. Penetration into Support Member
6d	0.113"	1.25"
8d	0.131"	1.50"
10d	0.148"	1.63"
12d	0.148"	1.63"
16d	0.162"	1.75"

   Fasteners other than common nails are not permitted without prior written approval from the engineer.
   f. All fasteners, including nails, for preservative-treated and fire retardant-treated wood shall be hot-dipped zinc-coated galvanized steel, stainless steel, silicon bronze or copper.
   g. Bolts shall be ASTM A36 or equal with ASTM A563 heavy hex nuts and ATSM F436 hardened washers, Grade A, unless noted otherwise.
   h. All laminated veneer lumber (LVL) shall be furnished by Trus-Joist Corporation or Versa-Lam by Boise Cascade Corporation.
   i. All pre-fabricated wood joists shall be TJI as manufactured by Trus-Joist MacMillan Corp. or BCI as manufactured by Boise Cascade Corp. All required blocking bridging and bracing shall be provided by joist manufacturer and installed by contractor. All penetrations through the joists shall be done per manufacturers' recommendations and requirements.
2. All wood in contact with concrete, masonry or soil shall be pressure treated or be redwood.
3. General framing and carpentry shall be connected as per "Minimum Nailing Schedule" on sheet S-603 unless noted otherwise.
4. All framing anchors, post caps, hold downs, column bases, etc. shall be provided by Simpson Strong-Tie or approved equal.
5. Provide solid shaped blocking at least 2 in.(nominal) thick and full depth of joist at ends and at each support of joist. Provide approved bridging at a 8'-0" o.c. maximum between joist end supports. Solid blocking between joists shall be nailed to the wood plate at the top of the wall with one Simpson "A35" framing anchor per each piece of blocking. Fill all holes in the framing anchors with 8-d x 1-1/2" nails (12 nails per A35).
6. Built-up beams of 2X-member 12 in. or less in depth shall be spiked together with not less than 16-d spikes at twelve-inch (12 in.) centers, staggered. If the depth of beam is more than twelve inches (12 in.), the members shall be connected together with 1/2" Ø bolts @ 24 in. o.c. staggered. Bolts shall be placed 1/4 the depth of the member from the top and bottom of the member.
7. All walls shall have a minimum of two top plates. Splices in top plates shall be staggered a minimum of four feet from the nearest splice in adjoining top plate.

SPECIAL INSPECTION AND QUALITY ASSURANCE

Special inspection and quality assurance, as required by section 1704 thru 1709 of the IBC, shall be provided by an independent agency employed by the owner unless waived by the building official. The contractor shall coordinate and cooperate with the required inspections. All testing and inspection reports shall be sent within 24 hours of the test to the architect, engineer, building official and contractor for review. Special inspection during fabrication is not required if the fabricator is registered and approved to perform such work with out special inspection. Items requiring special inspection and quality assurance are:

1. Soils (IBC 1704.7)
   a. Prior to placement of the prepared fill, the special inspector shall determine that the site has been prepared in accordance with the soils report.
   b. During placement and compaction of the fill material, the special inspector shall determine that the material being used and the maximum lift thickness comply with the soils report.
   c. The special inspector shall determine that the in-place dry density of the compacted fill material complies with the soils report.
      i. Continuous Footing Backfill: At each compacted backfill layer, at least one test for each 40 linear feet or less of wall length, but no fewer than 2 tests.
      ii. Spot Footing Backfill: Minimum of one compaction test for each lift for each spot footing.
   d. See specifications for further requirements.
2. Concrete placement (IBC Section 1704.4)
   a. Continuous special inspection shall be provided
   b. Cylinders, slump, temperature and air-entrainment shall be done for every 50 cubic yards or each day's production if the day's production is less than 50 cubic yards.
   c. Protection of concrete during cold and hot weather
   d. See specifications for further concrete testing requirements.
3. Bolts installed in concrete (IBC Section 1704.4)
   a. Continuous special inspection shall be provided for all bolts installed prior to and during concrete placement.
4. Embeds and Inserts installed in concrete (IBC Section 1704.4)
   a. Continuous special inspection shall be provided for all embeds and inserts installed prior to and during concrete placement.
5. Concrete reinforcing steel placement (IBC Section 1704.4)
   a. Periodic special inspected shall be provided for all reinforcing prior to concrete placement.
6. Structural welding, including steel deck (IBC 1707.2 and 1704.3)
   a. Periodic special inspection of roof decks.
   b. Periodic special inspection of single pass fillet welds less than or equal to 5/16"
   c. Continuous special inspection of single pass fillet welds greater than 5/16" and multi-pass fillet welds.
   d. Continuous special inspection of complete and partial penetration welds.
7. Metal deck using mechanical attachments (IBC Section 1704.15)
   a. Periodic special inspection of roof decks. Special inspection shall be done to verify size and spacing of shot pins / screws for deck attachment to the supporting structural. Also special inspection shall be done to verify spacing and size of seam attachments.
8. High Strength bolted connections (IBC Section 1704.3.3)
   a. Periodic special inspection of bearing type connections.
9. Structural masonry shall have Level 1special inspection per IBC section 1704.5.2
   a. Periodic special inspection shall be performed for
      i Proportions of site-prepared mortar, construction of mortar joints,
      ii Location of reinforcement and connectors,
      iii. Size and location of structural elements
      iv. Type, size and location and placement of anchors
      v. Size, grade and type and placement of reinforcement
      vi. Verify grout space is clean prior to grouting
      vii Protection of masonry during cold and hot weather
   b. Continuous special inspection shall be provided for grout placement and preparation of any required grout specimens, mortar specimens and prisms.
   c. Quality Assurance shall be according to Level 2 quality assurance (Table 1.14.1.2 of ACI 530/ASCE 5/TMS 402).
      i. Prior to construction, a letter of strength certification from the suppliers of the masonry units and grout shall be submitted.
      ii. During construction, the block, grout and mortar shall be tested for every 5,000 square feet of masonry constructed.
      iii. The contractor has the option of using the "Masonry Prism Test Method" per IBC Section 2105.2.2.2 in lieu of the "Unit Strength Method."
10. Rammed aggregate/ rock column construction (IBC Section 1704.8 & 9 and ESR-1685)
    a. Continuous special inspection shall be performed.
11. Wood diaphragms (IBC Section 1704.6 and 1707.3)
    a. The special inspector shall verify wood panel sheathing, grade, thickness and nominal size of framing members, adjoining panel edges, nail size and spacing.
12. Post Installed Anchors (IBC Section 1704.15)
    a. Epoxy Anchors
       i. Special inspection shall be performed per manufacturer's requirements and approved ICC-ES reports noted in Post-Installed Anchor section of the General Structural Notes prior to installation of epoxy and anchor rod.
    b. Mechanical Anchors and Screw Anchors
       i. Special inspection shall be performed per manufacturer's requirements and approved ICC-ES reports noted in POST INSTALLED ANCHOR section of the General Structural Notes prior to installation of mechanical or screw anchor.

SITE OBSERVATIONS BY STRUCTURAL ENGINEER

Site observations, as required by IBC section 1709, shall be done by the Engineer of Record or an approved subordinate at the stages of construction listed below. The contractor shall notify the engineer when he has reached the construction stage listed below and before the work to be observed is covered up, walled in or becomes otherwise hidden from view or in-accessible to any necessary corrections. At the conclusion of the project, the structural observer shall submit to the building official a written statement that the site visits have been made and identify any reported deficiencies that to the best of the structural observer's knowledge have not been resolved (See 1709.1).

1. Prior to footing pours
2. Prior to masonry grout pours
3. After roof deck is welded and prior to roofing
4. After substantial wall wood framing is completed
5. After substantial roof wood framing is completed
6. After substantial portion of wood shear walls are nailed
7. After wood roof sheathing is nailed and prior to roofing.

DEFERRED SUBMITTALS

For the purpose of this section, deferred submittals are defined as per section 106.3.4.2 of the IBC. Submittal documents for deferred submittal items shall be submitted to the engineer, architect and building official for their review for general conformance with the design of the building. Deferred structural submittals for this project are:

1. Open Web Steel Joists

LEGEND OF MARKS AND ABREVIATIONS

AB	ANCHOR BOLT(S)	k	KIP(S) = 1000 POUNDS
ABV	ABOVE	KLF	KIPS PER LINEAL FOOT
ALT	ALTERNATE	KSF	KIPS PER SQUARE FOOT
APPROX	APPROXIMATE	LBS	POUNDS
ARCH	ARCHITECT(URAL)	LF	LINEAL FOOT
BLDG	BUILDING	LLH	LONG LEG HORIZONTAL
BLW	BELOW	LLV	LONG LEG VERTICAL
BM	BEAM	LSV	LONG SIDE VERTICAL
B.N.	BOUNDARY NAILING	MAS	MASONRY
BOT	BOTTOM	MAX	MAXIMUM
BRG	BEARING	MCJ	MASONRY CONTROL JOINT
BTWN	BETWEEN	MC-x	MASONRY COLUMN MARK
CC.	CENTER-TO CENTER	MECH	MECHANICAL
C.J.	CONST/CONTROL JOINT	MFR	MANUFACTURER
CMU	CONCRETE MASONRY UNIT	MIN	MINIMUM
COL	COLUMN	MISC	MISCELLANEOUS
CONC	CONCRETE	ML-x	MASONRY LINTEL
CONST	CONSTRUCTION	MW-x	MASONRY WALL
CRW-x	CONCRETE RETAINING WALL	NIC	NOT IN CONTRACT
CTR	CENTER	NTS	NOT TO SCALE
CW-x	CONCRETE WALL	O.C.	ON CENTER
DB	DECK BEARING	O.F.	OUTSIDE FACE
DBA	DEFORMED BAR ANCHOR	OPNG	OPENING
DBE	DECK BEARING ELEVATION	OPP	OPPOSITE
DBL	DOUBLE	PCF	POUNDS PER CUBIC FOOT
DET	DETAIL	PL	PLATE
DIA	DIAMETER	PLF	POUNDS PER LINEAL FOOT
DIM	DIMENSION	PNL	PANEL
DN	DOWN	PSF	POUNDS PER SQUARE FOOT
DWG	DRAWING	PSI	POUNDS PER SQUARE INCH
DWL	DOWEL	PT	POINT
EA	EACH	REINF	REINFORCING
E.D.	EDGE NAILING	REQD	REQUIRED
E.F.	EACH FACE	R.D.	ROOF DRAIN
E.J.	EXPANSION JOINT	RTU	ROOF TOP UNITS
ELEC	ELECTRICAL	SBP-x	STEEL BASE PLATE MARK
ELEV	ELEVATION	SC-x	STEEL COLUMN MARK
EQUIP	EQUIPMENT	SCP-x	STEEL CAP PLATE MARK
EQ	EQUAL	SHT	SHEET
E.W.	EACH WAY	SI	SPECIAL INSPECTION
EXST	EXISTING	SIM	SIMILAR
EXP	EXPANSION	SMU	SUSPENDED MECHANICAL UNITS
EXT	EXTERIOR	SOG	SLAB-ON-GRADE
FC-x	CONTINUOUS FOOTING MARK	SQ	SQUARE
F.D.	FLOOR DRAIN	STAG	STAGGERED
FDN	FOUNDATION	STD	STANDARD
F.F.	FINISHED FLOOR	STL	STEEL
F.N.	FIELD NAILING	STR	STRUCTURAL
FR-x	RECTANGULAR FOOTING MARK	STS	SELF TAPPING SCREWS
FS-x	SQUARE FOOTING MARK	T&B	TOP AND BOTTOM
FT	FOOT	TEMP	TEMPERATURE
FTG	FOOTING	THDS	THREADS
FTS-x	THICKEN SLAB MARK	T.O.	TOP OF
GA	GAUGE	TOC	TOP OF CONCRETE
GALV	GALVANIZED	TOD	TOP OF DECK
GLB	GLU-LAM BEAM	TOF	TOP OF FOOTING
GSN	GENERAL STRUCTURAL NOTES	TOS	TOP OF STEEL
HB	HORIZONTAL BRIDGING	TOW	TOP OF WALL
HORIZ	HORIZONTAL	TYP	TYPICAL
HSA	HEADED STUD ANCHOR	UNO	UNLESS NOTED OTHERWISE
HT	HEIGHT	VERT	VERTICAL
ICBO	INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS	W/	WITH
IBC	INTERNATIONAL BUILDING CODE	WT	WALL THICKNESS
I.F.	INSIDE FACE	WWF	WELDED WIRE FABRIC
IN.	INCH	WWM	WELDED WIRE MESH
INT	INTERIOR		
JT	JOINT		
JST	JOIST		

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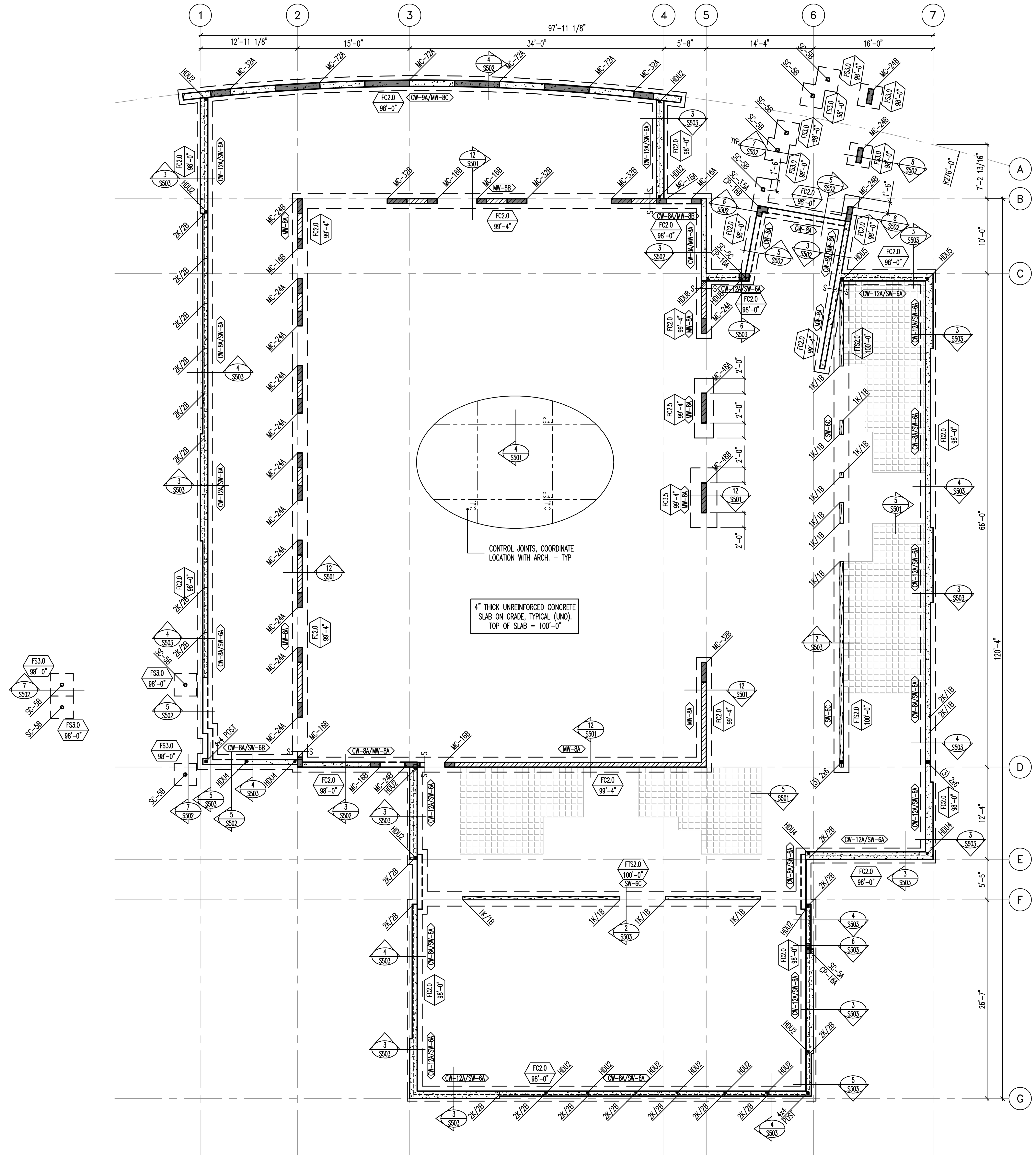
GENERAL STRUCTURAL NOTES

S001



FOOTING AND FOUNDATION PLAN

SCALE: 1/8"=1'-0"

0 4' 8' 16'

NORTH

MARKS AND SYMBOLS LEGEND

SECTION MARK
SHEET NUMBER

FOOTING DESIGNATION
TOP OF FOOTING ELEVATION

S——S INDICATES FOOTING STEP, SEE DETAIL 1/S501.

INDICATES CONCRETE WALL.

INDICATES MASONRY WALL.

INDICATES WOOD STUD WALL.

DEPRESS FOUNDATION WALL AND POUR SLAB OVER, SEE DETAIL 3/S502.

INDICATES DEPRESSED SLAB, SEE ARCHITECTURAL PLANS.

CW-x INDICATES CONCRETE FOUNDATION WALL TYPE, SEE SCHEDULE ON SHEET S601.

MW-x INDICATES MASONRY WALL TYPE, SEE SCHEDULE ON SHEET S602.

SW-x INDICATES WOOD SHEARWALL TYPE, SEE SCHEDULE ON SHEET S603.

CW-x/_W-x INDICATES WOOD STUD OR MASONRY WALL (AND TYPE) OVER CONCRETE WALL (AND TYPE), SEE SCHEDULES ON SHEETS S601 TO S603.

FCxx INDICATES CONTINUOUS FOOTING. SEE SCHEDULE ON SHEET S601.

FSxx INDICATES SPOT FOOTING. SEE SCHEDULE ON SHEET S601.

FTSxx INDICATES THICKENED SLAB FOOTING. SEE SCHEDULE ON SHEET S601.

C.J. INDICATES CONTROL/CONSTRUCTION JOINT, SEE DETAILS 4/S501 AND 5/S501.

SC-x INDICATES STEEL COLUMN. SEE SCHEDULE ON SHEET S601.

MC-x INDICATES MASONRY COLUMN TYPE. SEE SCHEDULE ON SHEET S602.

FOOTING AND FOUNDATION PLAN NOTES

1. COORDINATE LOCATION OF DEPRESSED SLABS, SLOPED SLABS, AND FLOOR DRAINS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR EXTERIOR CONCRETE WORK AT DOORS, SIDEWALKS, ETC.
3. SEE ARCHITECTURAL DRAWINGS FOR CONTROL JOINT LOCATIONS.
4. SEE "EARTHWORK" NOTES ON SHEET S001 FOR SOIL CONSOLIDATION REQUIREMENTS BENEATH FOOTINGS.
5. ALL SPOT FOOTINGS SHALL BE CENTERED UNDER COLUMNS (UNO).
6. SEE DETAILS 1/S502 AND 2/S502 FOR CONDITION WHERE BURIED PIPES RUN PARALLEL AND PERPENDICULAR TO FOOTINGS.
7. SEE DETAIL 4/S501 FOR TYPICAL CONTROL/CONSTRUCTION JOINTS IN CONCRETE SLAB ON GRADE.
8. SEE DETAIL 6/S501 FOR SLAB REINFORCING WHERE CONTROL JOINTS ARE DISCONTINUOUS.
9. SEE DETAIL 7/S501 FOR ADDITIONAL REINFORCING AT MISCELLANEOUS OPENINGS IN MASONRY WALLS.
10. SEE DETAIL 8/S501 FOR CONDITION AT RECESSES IN MASONRY WALLS.
11. SEE DETAIL 9/S501 FOR TYPICAL CONTROL JOINTS IN MASONRY WALLS.
12. SEE DETAIL 10/S501 FOR TERMINATION OF HORIZONTAL REINFORCING IN MASONRY WALLS.
13. SEE DETAIL 11/S501 FOR ANCHORAGE OF HOUSEKEEPING PADS
14. SEE SHEET S603 FOR HOLDOWN SCHEDULE.
15. SEE DETAIL 1/S503 FOR TYPICAL SILL PLATE BOLTING DETAIL.
16. ALL EXTERIOR BEARING WALLS SHALL BE 2x6 STUDS AT 16" O.C. - TYPICAL (UNO).
17. ALL INTERIOR BEARING WALLS SHALL BE 2x6 STUDS AT 16" O.C. - TYPICAL (UNO).
18. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO ALL COLUMNS.

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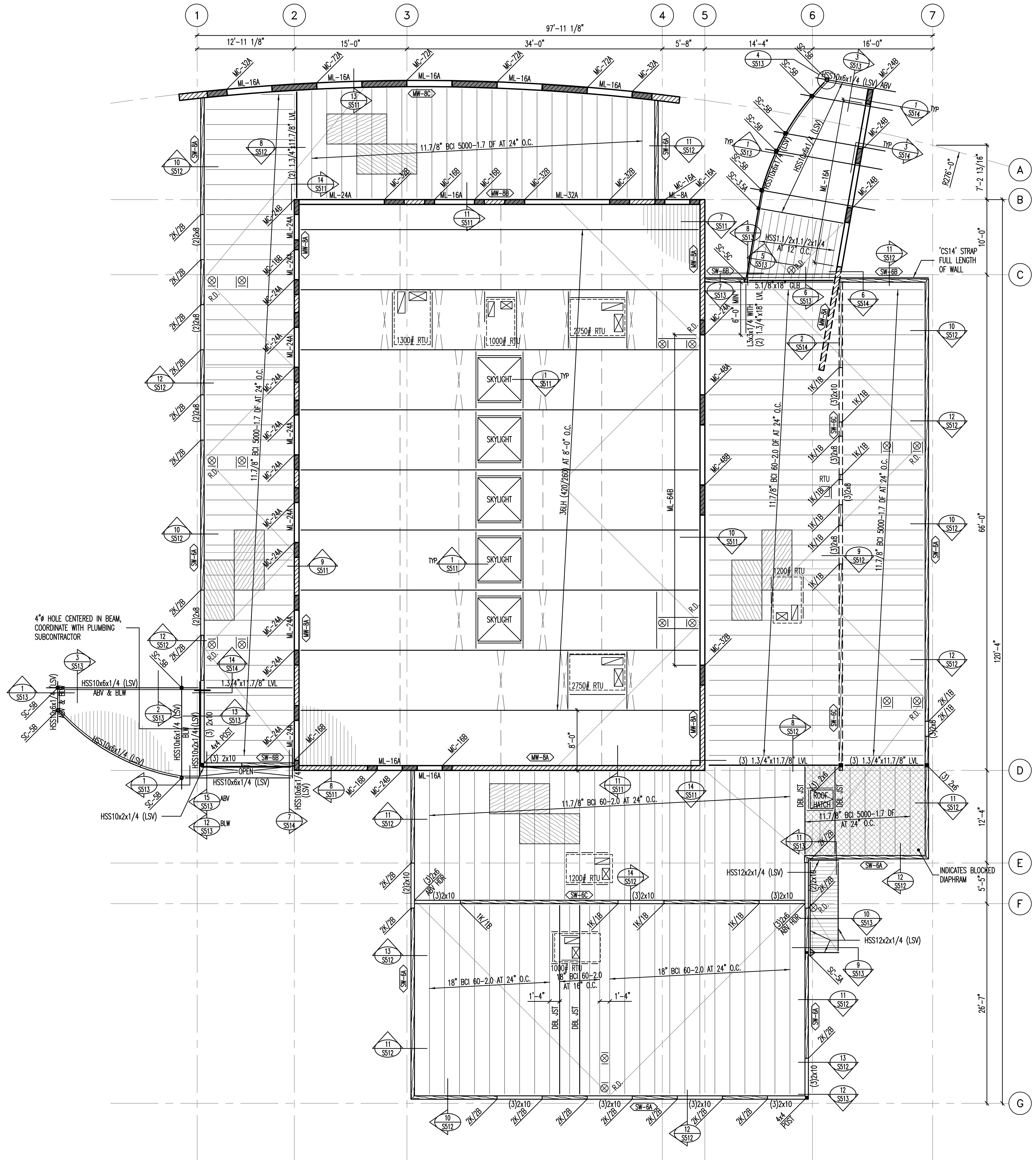
FOOTING AND FOUNDATION PLAN

S101



ROOF FRAMING PLAN

SCALE: 1/8"=1'-0"

MARKS AND SYMBOLS LEGEND

- SECTION MARK / SHEET NUMBER
- INDICATES CONCRETE WALL WHICH EXTENDS ABOVE ROOF DECK.
- INDICATES CONCRETE WALL WHICH STOPS AT ROOF DECK.
- INDICATES WOOD STUD WALL WHICH EXTENDS ABOVE ROOF.
- INDICATES WOOD STUD WALL WHICH STOPS AT ROOF.
- INDICATES METAL ROOF DECK. SEE GENERAL STRUCTURAL ON SHEET S001.
- INDICATES WOOD ROOF SHEATHING, SEE SCHEDULE ON SHEET S603.
- MW-x — INDICATES MASONRY WALL TYPE, SEE SCHEDULE ON SHEET S602.
- SW-x — INDICATES WOOD SHEARWALL TYPE, SEE SCHEDULE ON SHEET S603.
- _LH (**/**) — INDICATES LH-SERIES JOIST WITH ALLOWABLE TOTAL LOAD / ALLOWABLE LIVE (SNOW) LOAD.
- xK/xB — INDICATES NUMBER OF KING STUDS AND NUMBER OF BEARING STUDS, SEE DETAIL 7/S512.
- SC-x — INDICATES STEEL COLUMN. SEE SCHEDULE ON SHEET S601.
- MC-x — INDICATES MASONRY COLUMN TYPE. SEE SCHEDULE ON SHEET S602.
- ML-x — INDICATES MASONRY LINTEL TYPE. SEE SCHEDULE ON SHEET S602.
- R.D. — INDICATES ROOF DRAIN, SEE DETAIL 2/S511.

ROOF FRAMING PLAN NOTES

1. VERIFY ALL ROOF OPENINGS FOR MECHANICAL SHAFTS, DRAINS, ETC. WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. JOIST SUPPLIER SHALL DESIGN ALL ROOF JOIST BEARING ENDS AT MASONRY WALLS TO TRANSFER 1500# (ALLOWABLE) AXIAL LOAD THROUGH JOIST BEARING SHOE.
3. ALL JOISTS SHALL HAVE 5" DEEP BEARING ENDS (UNO).
4. ALL ROOF OPENINGS GREATER THAN, OR EQUAL TO, 12" x 12" SHALL BE FRAMED AS INDICATED IN DETAILS 1/S511 AND 2/S511. FOR OPENINGS WHICH CUT LESS THAN TWO DECK FLUTES, SEE DETAIL 3/S511.
5. SEE DETAIL 4/S511 WHEN CONCENTRATED LOADS ARE LOCATED MORE THAN 6" FROM JOIST OR JOIST GIRDER PANEL POINT.
6. SEE DETAIL 5/S511 WHEN MECHANICAL UNITS ARE HUNG BELOW JOISTS.
7. VERIFY SIZE, WEIGHT, AND LOCATION OF ALL ROOF TOP MECHANICAL UNITS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. SEE DETAIL 6/S511 FOR STEEL FRAMES AT ALL ROOF TOP EQUIPMENT. COORDINATE OPENINGS WITH MECHANICAL, ELECTRICAL, AND GENERAL CONTRACTORS.
8. LOCATE MISCELLANEOUS MECHANICAL OPENINGS BETWEEN JOISTS, NOT UNDERNEATH THEM.
9. OPEN WEB STEEL JOISTS AND JOIST GIRDERS SHALL BE DESIGNED BY THE MANUFACTURER TO SUPPORT THE MECHANICAL AND LATERAL LOADS SHOWN ON THE ROOF FRAMING PLANS IN ADDITION TO THE UNIFORM AND POINT LOADS SHOWN.
10. JOIST BRIDGING SHOWN ON PLANS IS FOR REPRESENTATION ONLY; ACTUAL SIZE, QUANTITY, AND LOCATION WILL BE DETERMINED BY THE JOIST SUPPLIER PER 'SJI' REQUIREMENTS. ALL BRIDGING AND BRIDGING ANCHORS NEED TO BE IN PLACE BEFORE APPLYING ANY LOADS. WHERE SKYLIGHT OR MECHANICAL UNITS/DUCTS INTERRUPT HORIZONTAL BRIDGING, PROVIDE CROSS BRIDGING AT JOIST SPACES ON EACH SIDE OF THE OPENING. WHERE DIAGONAL BRIDGING CONFLICTS WITH MECHANICAL DUCTS, REMOVE DIAGONAL BRIDGING AND REPLACE WITH HORIZONTAL BRIDGING AFTER ROOF DECK IS IN PLACE.
11. JOIST DESIGNER SHALL DESIGN JOISTS AND SUPPLY ADDITIONAL BRIDGING AS REQUIRED FOR UPLIFT DUE TO WIND. ASSUME:
    DEAD LOAD = 12psf WIND UPLIFT = 20psf (GROSS)
    NO 1/3 STRESS INCREASE ALLOWED.
12. SEE DETAIL 1/S511 FOR FRAMING AROUND ALL WOOD ROOF OPENINGS.
13. SEE DETAIL 2/S511 FOR TYPICAL BUILT-UP BEAM DETAIL.
14. SEE DETAIL 3/S511 FOR TYPICAL TOP PLATE SPLICE DETAIL.
15. SEE DETAIL 4/S511 FOR TYPICAL TOP PLATE SPLICE SCHEDULE AT PIPE.

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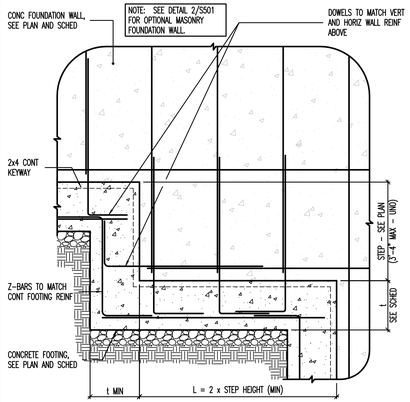
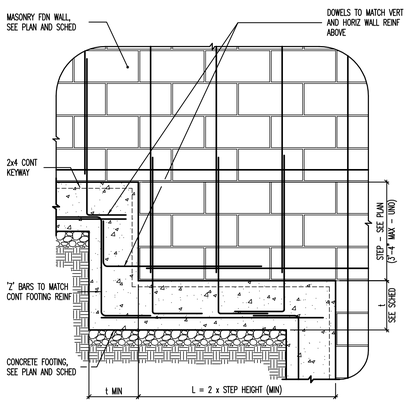
ROOF FRAMING PLAN

S111



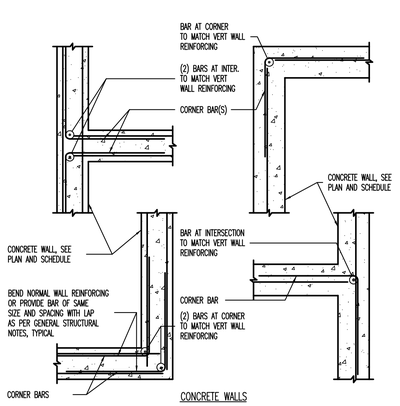
1 TYPICAL FOOTING STEP DETAIL

NO SCALE



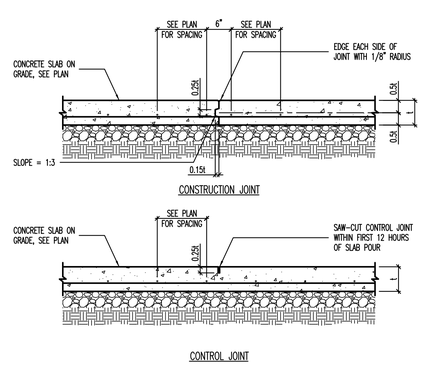
2 TYPICAL FOOTING STEP AT MASONRY FOUNDATION WALL [OPTIONAL]

NO SCALE



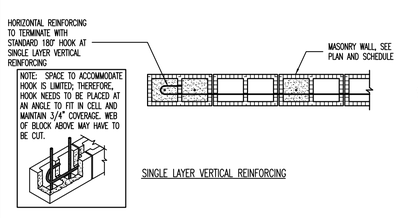
3 TYPICAL CORNER WALL REINFORCING [PLAN VIEW]

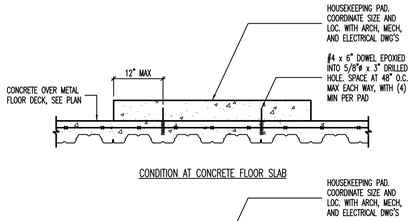
NO SCALE



4 TYPICAL SLAB ON GRADE JOINT DETAILS

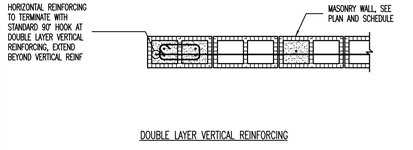
NO SCALE





5 JOINT DETAILS AT SLAB DEPRESSIONS

NO SCALE



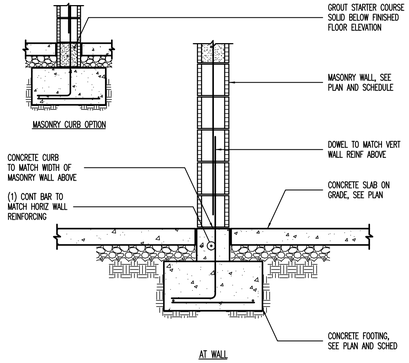
6 LOCATIONS REQUIRING ADDITIONAL SLAB REINFORCING [PLAN VIEW]

NO SCALE

7 REINFORCING AT UNSCHEDULED MISCELLANEOUS OPENINGS OR RECESSES IN MASONRY WALLS

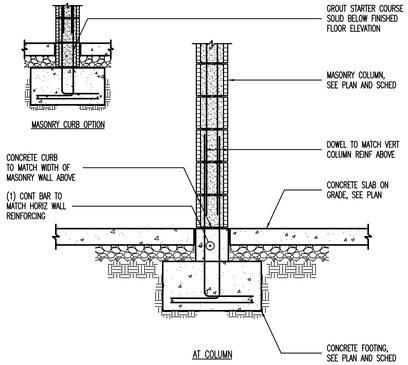
NO SCALE

VERTICAL REINFORCING ADJACENT TO UNSCHEDULED OPENING OR RECESS
WHERE OPENING WIDTH IS LESS THAN OR EQUAL TO 3'-0", USE (2) #5 BARS.
WHERE OPENING WIDTH IS GREATER THAN 3'-0" BUT LESS THAN OR EQUAL TO 6'-0", USE MC-24A
WHERE OPENING WIDTH IS GREATER THAN 6'-0" CONSULT STRUCTURAL ENGINEER.



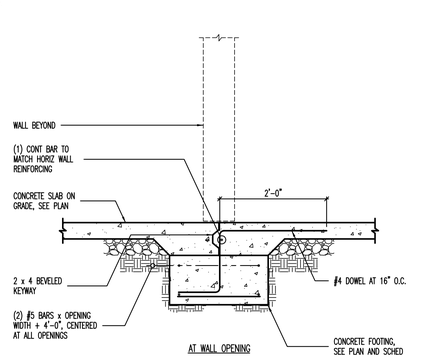
8 TYPICAL REINFORCING AT RECESS IN MASONRY WALLS

NO SCALE



9 MASONRY CONTROL JOINT DETAIL AT MASONRY WALL

NO SCALE

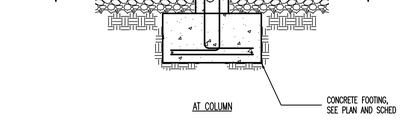


10 TERMINATION OF HORIZONTAL REINFORCING IN 8" OR 10" MASONRY WALL [PLAN VIEW]

NO SCALE

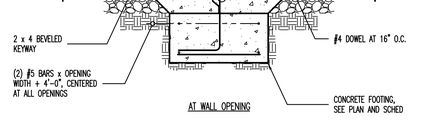
11 HOUSEKEEPING PAD DETAIL

NO SCALE



12 TYPICAL INTERIOR MASONRY WALL ON CONCRETE CURB

NO SCALE



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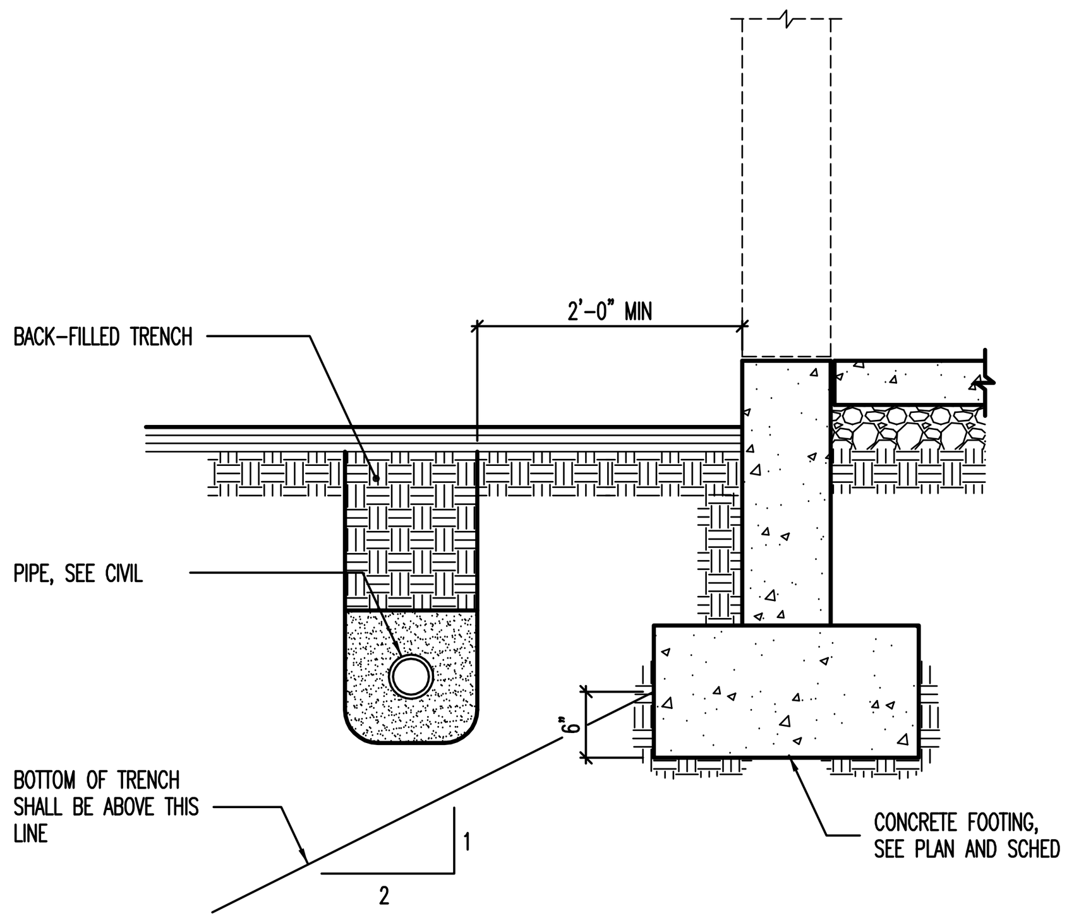
DATE/REVISION	PROJECT #.
11 · 24 · 10	10314

FOOTING AND FOUNDATION DETAILS

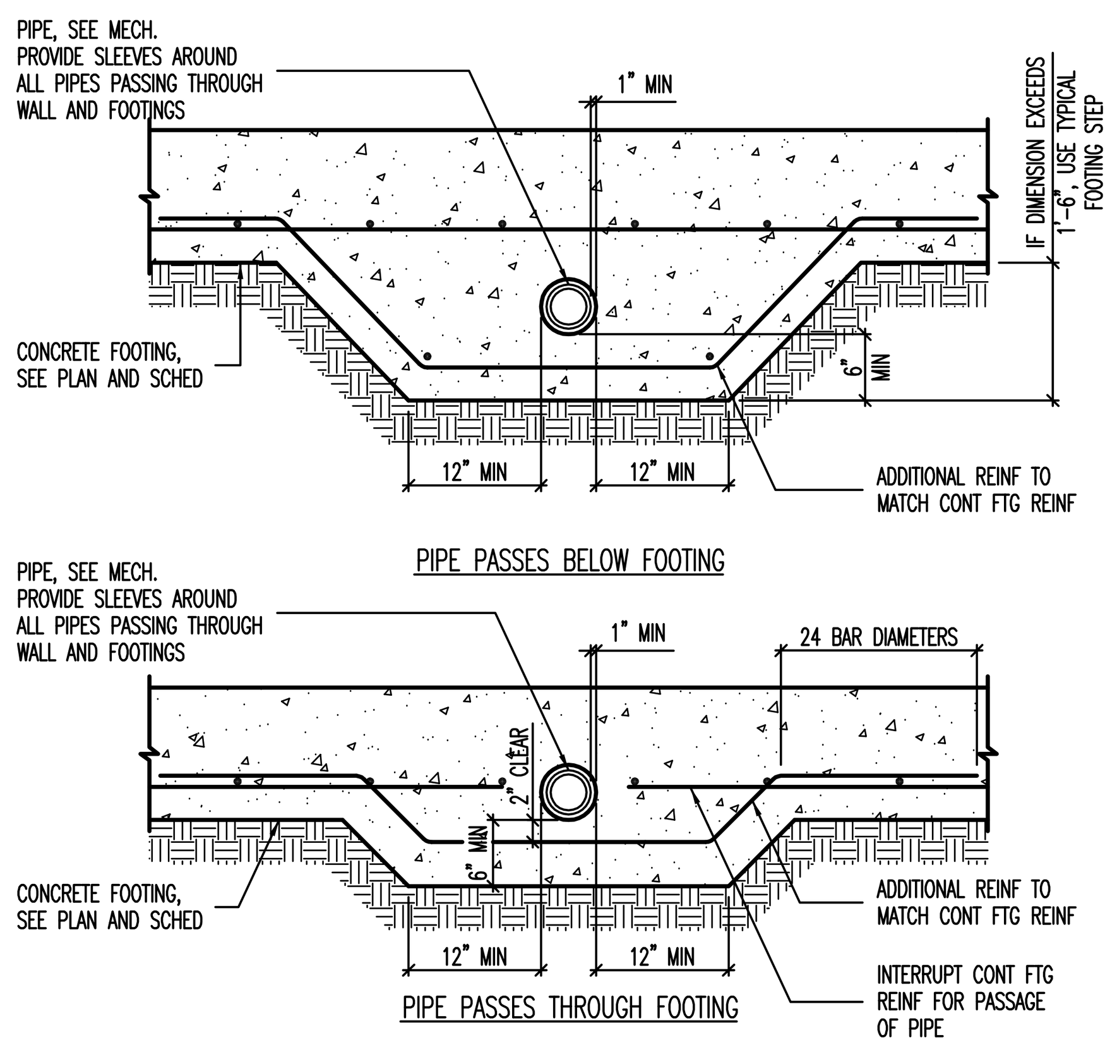
S501



1 CONDITION AT PIPE PARALLEL TO CONCRETE FOOTING

NO SCALE

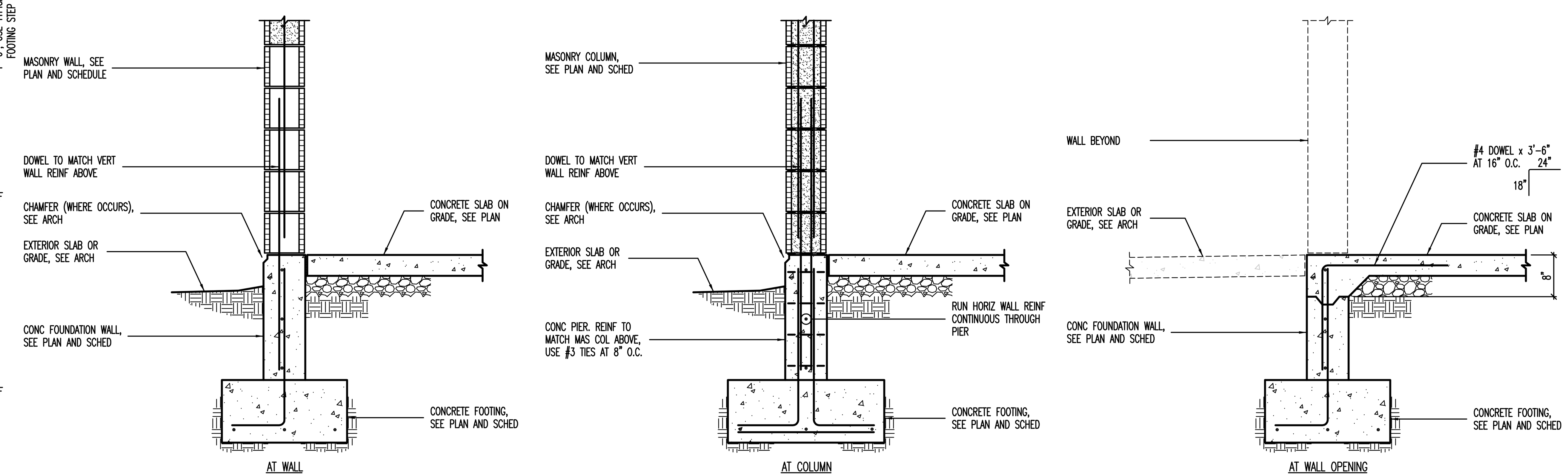
2114048-01



2 CONDITIONS AT PIPE PERPENDICULAR TO FOOTING

NO SCALE

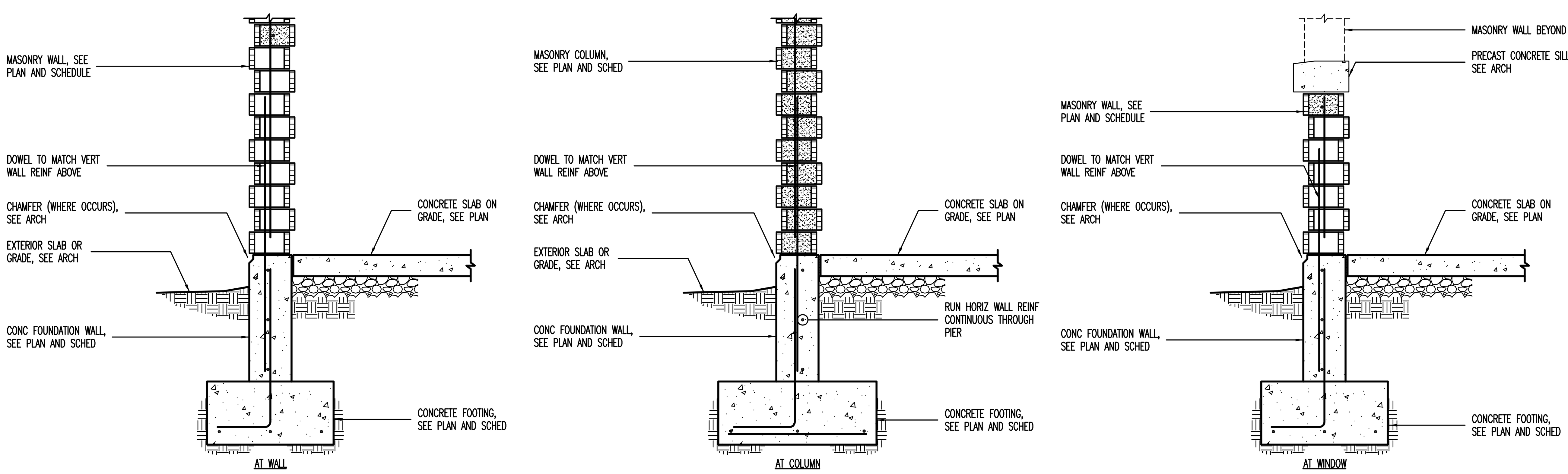
16384-00



3 TYPICAL EXTERIOR FOUNDATION WALL DETAIL AT MASONRY WALL

NO SCALE

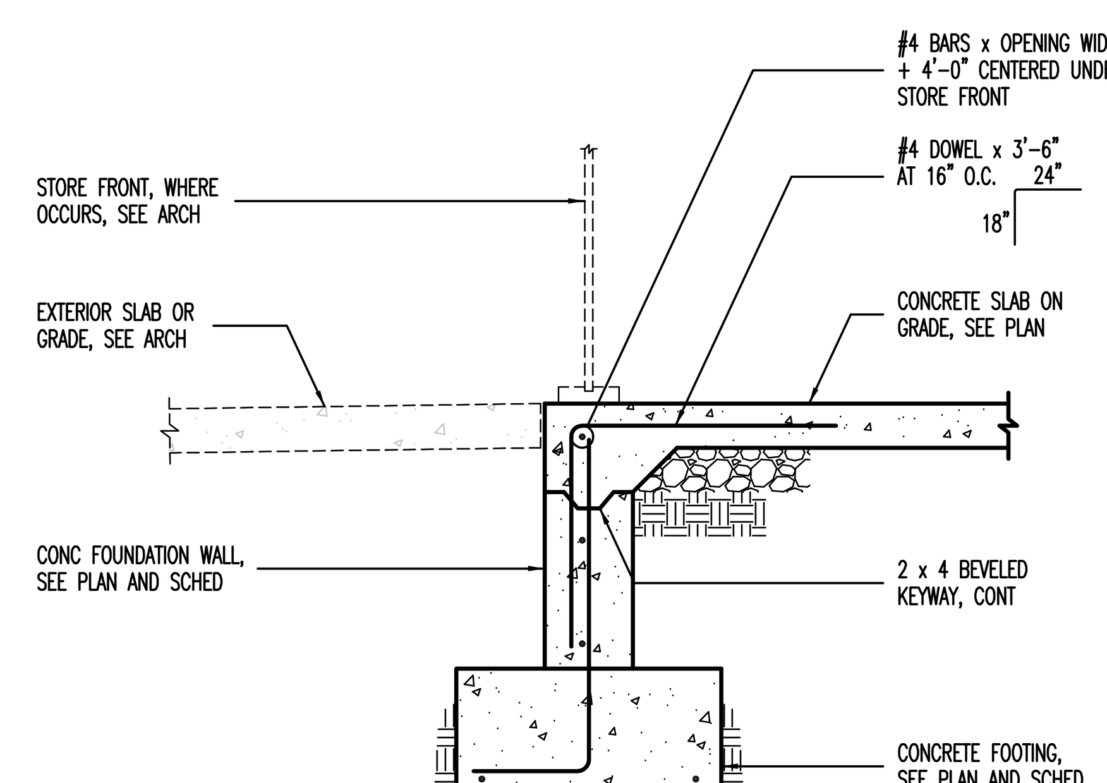
2638336-01 2638848-00 2638336-00



4 TYPICAL EXTERIOR FOUNDATION WALL AT MASONRY WALL

NO SCALE

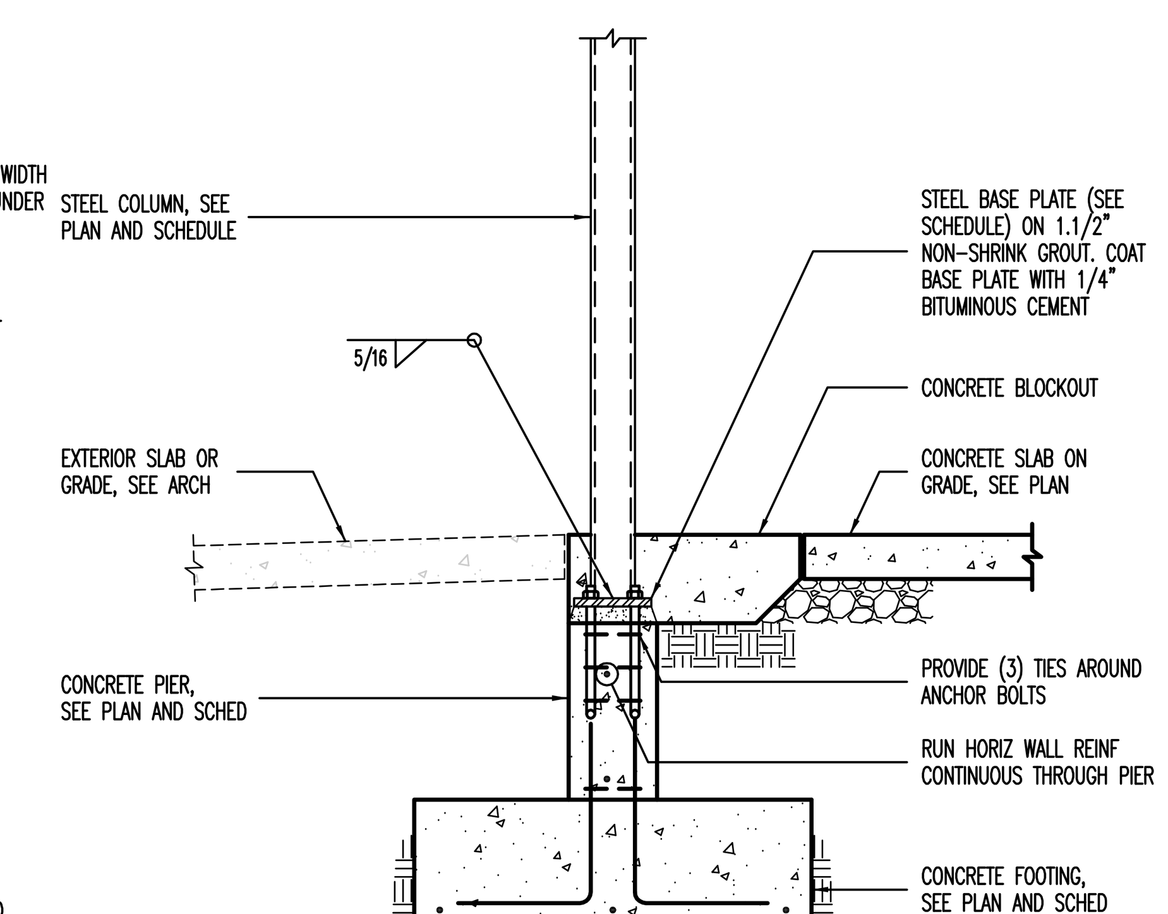
2638336-01 2638848-00 2638336-02



5 FOUNDATION WALL DETAIL AT STORE FRONT

NO SCALE

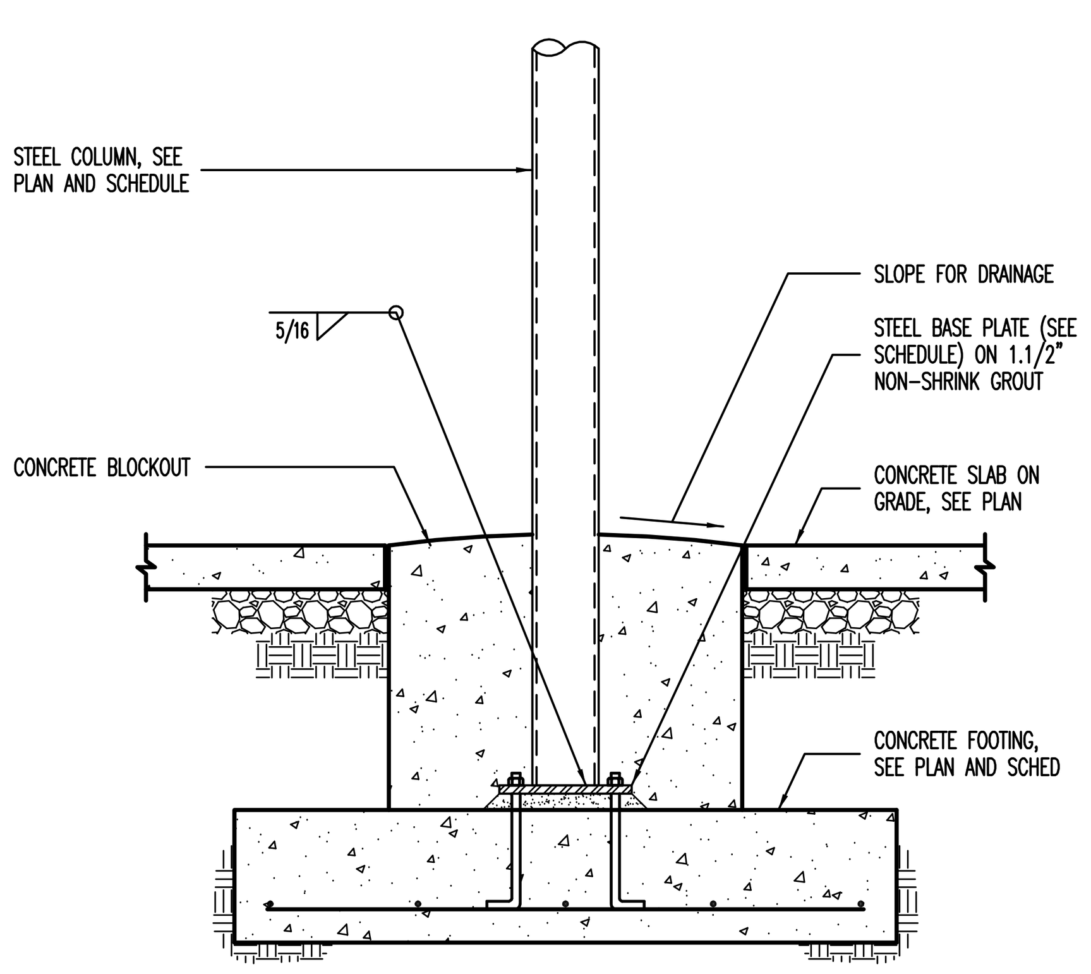
2113536-21



6 TYPICAL STEEL COLUMN BEARING AT EXTERIOR CONCRETE FOUNDATION WALL

NO SCALE

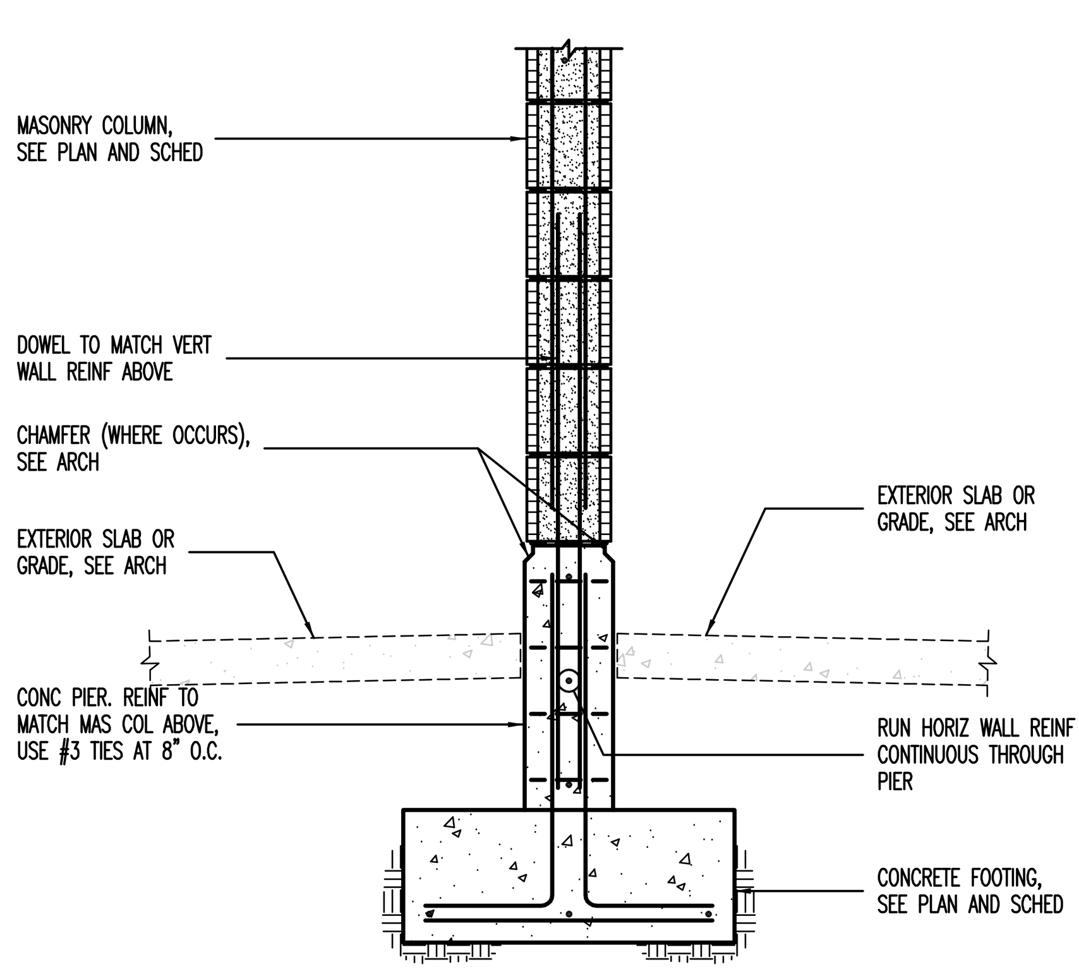
2245632-22



7 STEEL COLUMN BEARING AT CONCRETE FOOTING

NO SCALE

2245632-23



8 EXTERIOR FOUNDATION WALL AT MASONRY COLUMN

NO SCALE

10314S502

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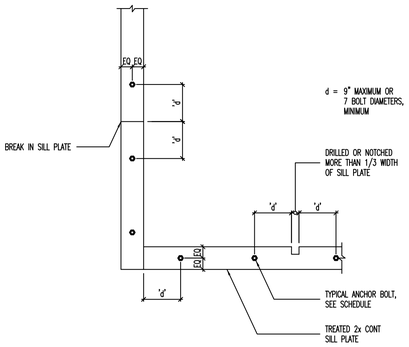
DATE/REVISION 11 · 24 · 10

PROJECT #. 10314

FOOTING AND FOUNDATION DETAILS

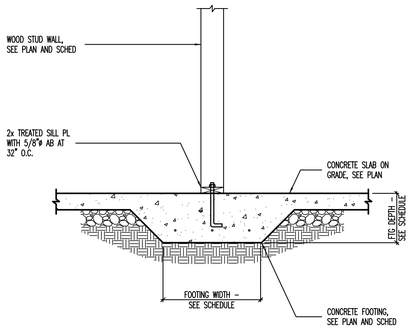
S502

Q:\2010\10314\Struct\10314_S-502.dwg, S-502, 11/18/2010 3:56:00 PM, jaym



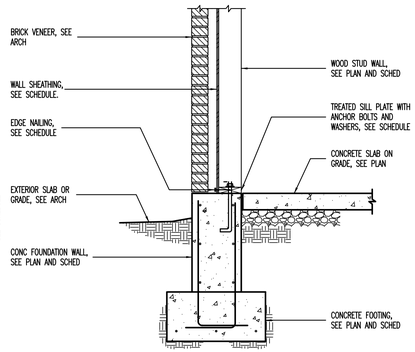
1 SILL PLATE BOLTING DETAIL [PLAN VIEW]

33391-00 NO SCALE



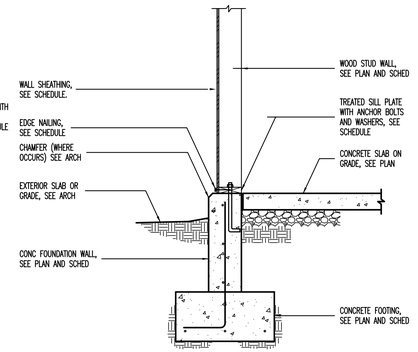
2 THICKENED SLAB FOOTING AT INTERIOR STUD WALL

40644-00 NO SCALE



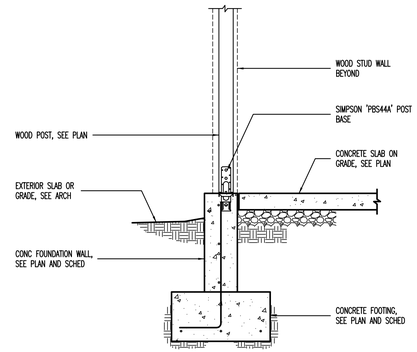
3 WOOD STUD WALL/VENEER AT 12" CONCRETE FOUNDATION WALL

214816-01 NO SCALE



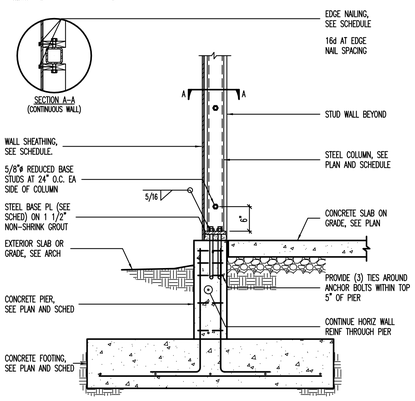
4 CONCRETE FOUNDATION WALL DETAIL

214816-00 NO SCALE



5 WOOD POST AT CONCRETE FOUNDATION WALL

1024_S-503 NO SCALE



6 TYPICAL STEEL COLUMN IN SHEARWALL TO CONCRETE PIER

22WHS-16 NO SCALE

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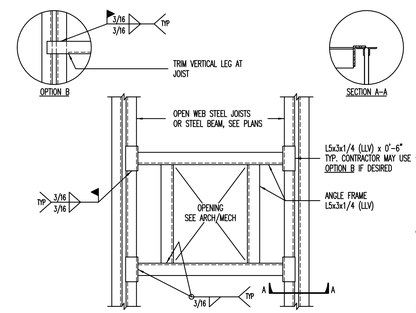
11 • 24 • 10	10314

FOOTING AND FOUNDATION DETAILS

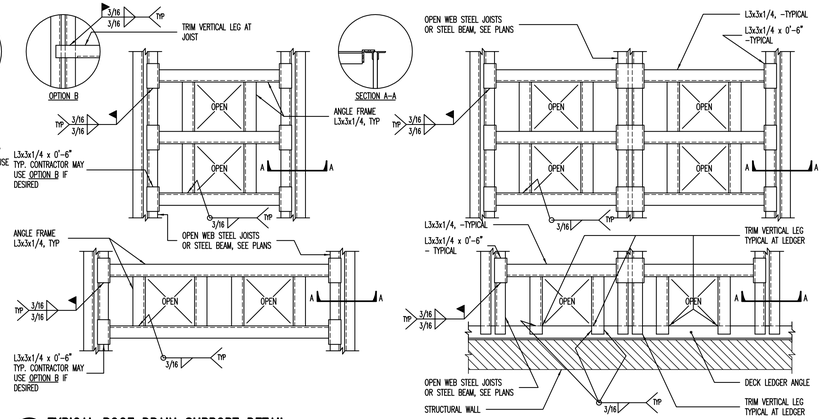
S503



NOTES:
1. SEE DETAIL 3/S511 FOR OPENINGS LESS THAN 12" IN DIAMETER.
2. PROVIDE EXTRA WEB MEMBERS PER DETAIL 4/S511 FOR OPENINGS 6'-0" AND LARGER.
3. SEE TYPICAL ROOF TOP MECHANICAL UNIT SUPPORT DETAIL(S) FOR FRAMES UNDER MECHANICAL UNITS.
4. ROOF DECK TO BE WELDED TO ANGLE FRAMING.

1 TYPICAL ROOF OPENING DETAIL [PLAN VIEW]

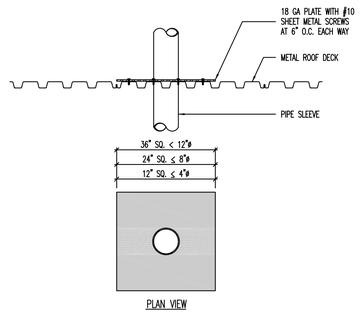
123312-00 NO SCALE



2 TYPICAL ROOF DRAIN SUPPORT DETAIL [PLAN VIEW]

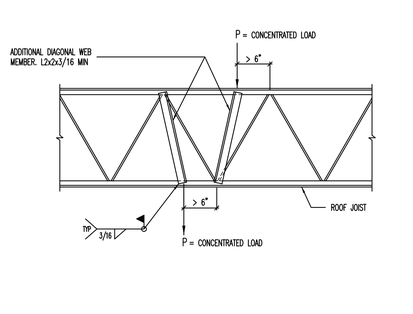
123305-00 NO SCALE

NOTE: WHERE CONCENTRATED LOADS ON OPEN WEB JOISTS ARE LOCATED MORE THAN 6" FROM THE PANEL WORK POINTS AT EITHER THE TOP OR BOTTOM CHORD, THE CONTRACTOR SHALL INSTALL ADDITIONAL DIAGONAL WEB MEMBERS AT THE LOCATION OF THE CONCENTRATED LOAD.



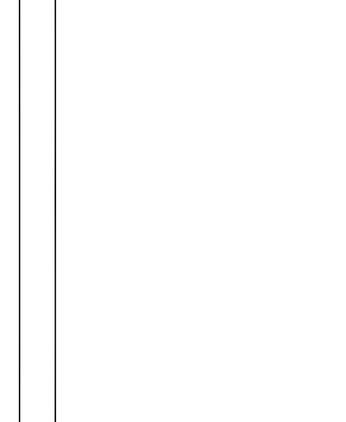
3 TYPICAL PIPE SLEEVE THROUGH ROOF DECK

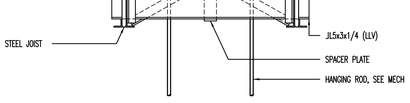
2006-00 NO SCALE



4 TYPICAL JOIST REINFORCING DETAIL FOR LOADS GREATER THAN 250 POUNDS

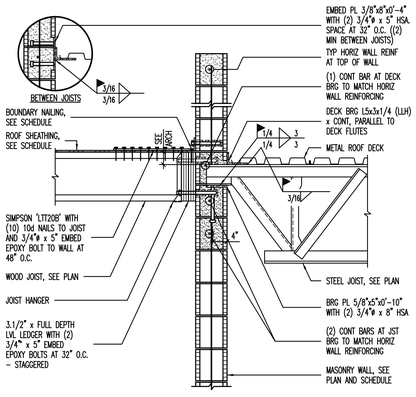
123178-00 NO SCALE





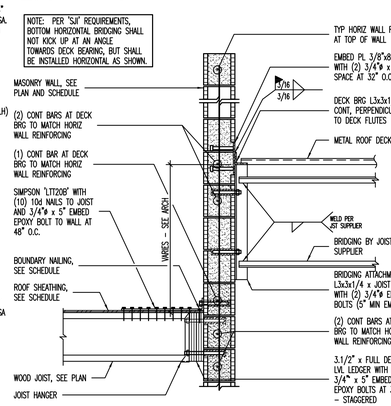
5 TYPICAL HANGING MECHANICAL UNIT SUPPORT DETAIL

123176-01 NO SCALE



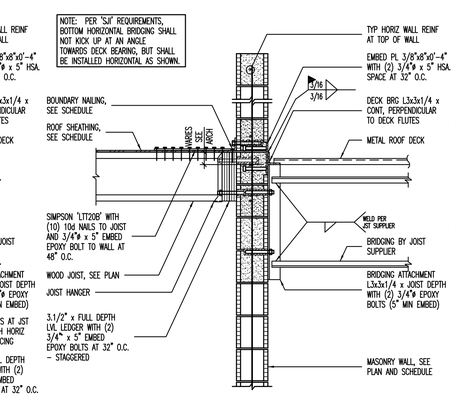
6 TYPICAL ROOF TOP MECHANICAL UNIT SUPPORT DETAIL [PLAN VIEW]

123305-01 NO SCALE



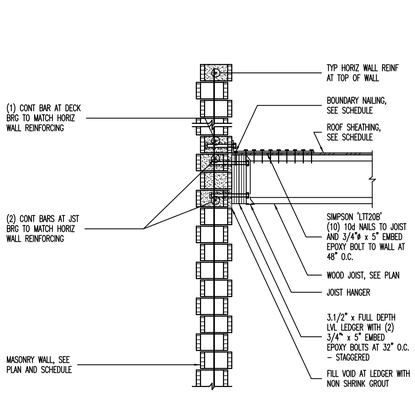
7 TYPICAL 'K' JOIST (5" BEARING ENDS) BEARING AT 8" OR 10" MASONRY WALLS

457K00-00 NO SCALE



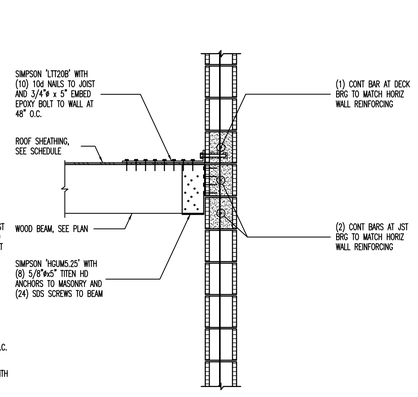
8 TYPICAL DECK BEARING WITH BRIDGING ATTACHMENT AT 8" OR 10" MASONRY WALLS

457K00-00 NO SCALE



9 TYPICAL 'LH'/WOOD JOIST BEARING AT 8" OR 10" MASONRY WALLS (STEEL ROOF ABOVE)

102K4_S-511 NO SCALE



10 TYPICAL 'LH'/WOOD JOIST BEARING AT 8" OR 10" MASONRY WALLS (WOOD ROOF ABOVE)

102K4_S-511 NO SCALE

11 TYPICAL DECK BEARING WITH BRIDGING ATTACHMENT AT 8" OR 10" MASONRY WALLS (STEEL ROOF ABOVE)

457K00-00 NO SCALE

12 TYPICAL DECK BEARING WITH BRIDGING ATTACHMENT AT 8" OR 10" MASONRY WALLS (WOOD ROOF ABOVE)

457K00-00 NO SCALE

13 JOIST BEARING AT OFFSET MASONRY WALL

102K4_S-511 NO SCALE

14 WOOD BEAM AT MASONRY WALL

102K4_S-511 NO SCALE

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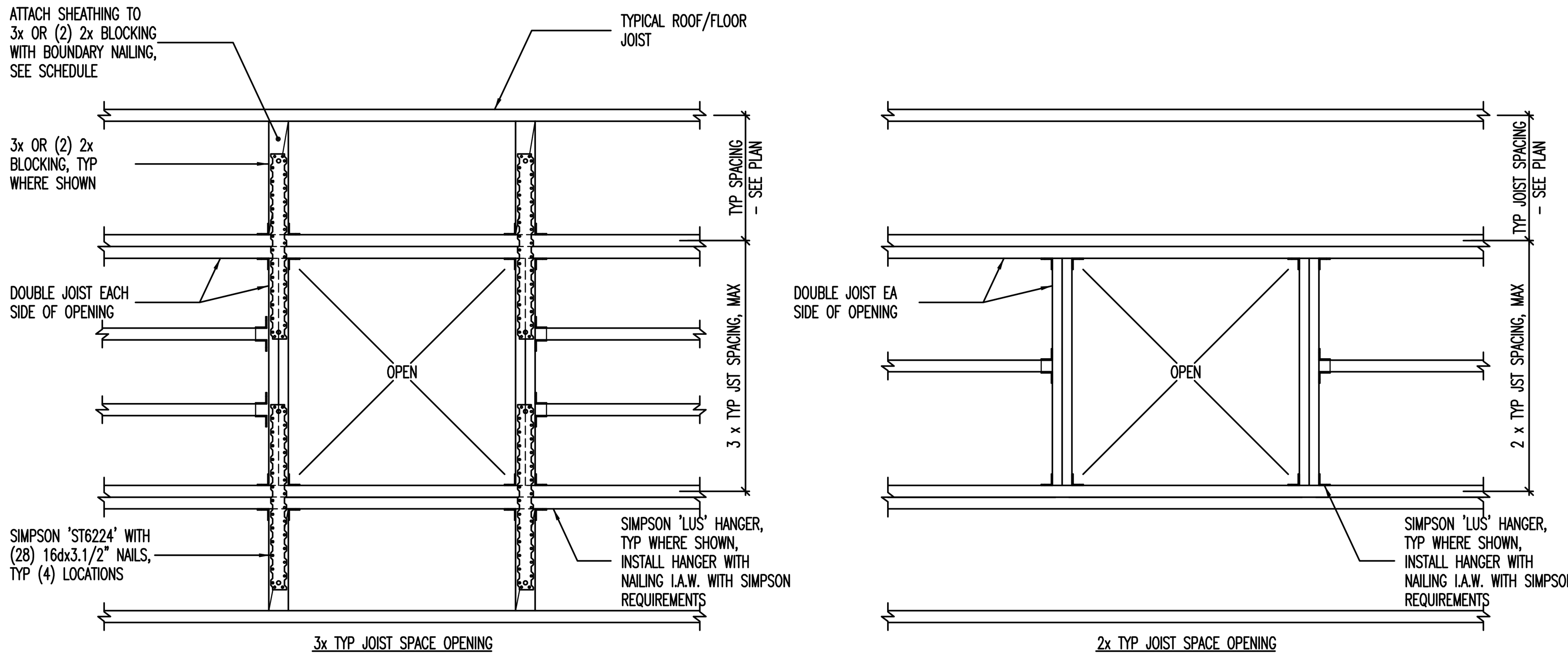
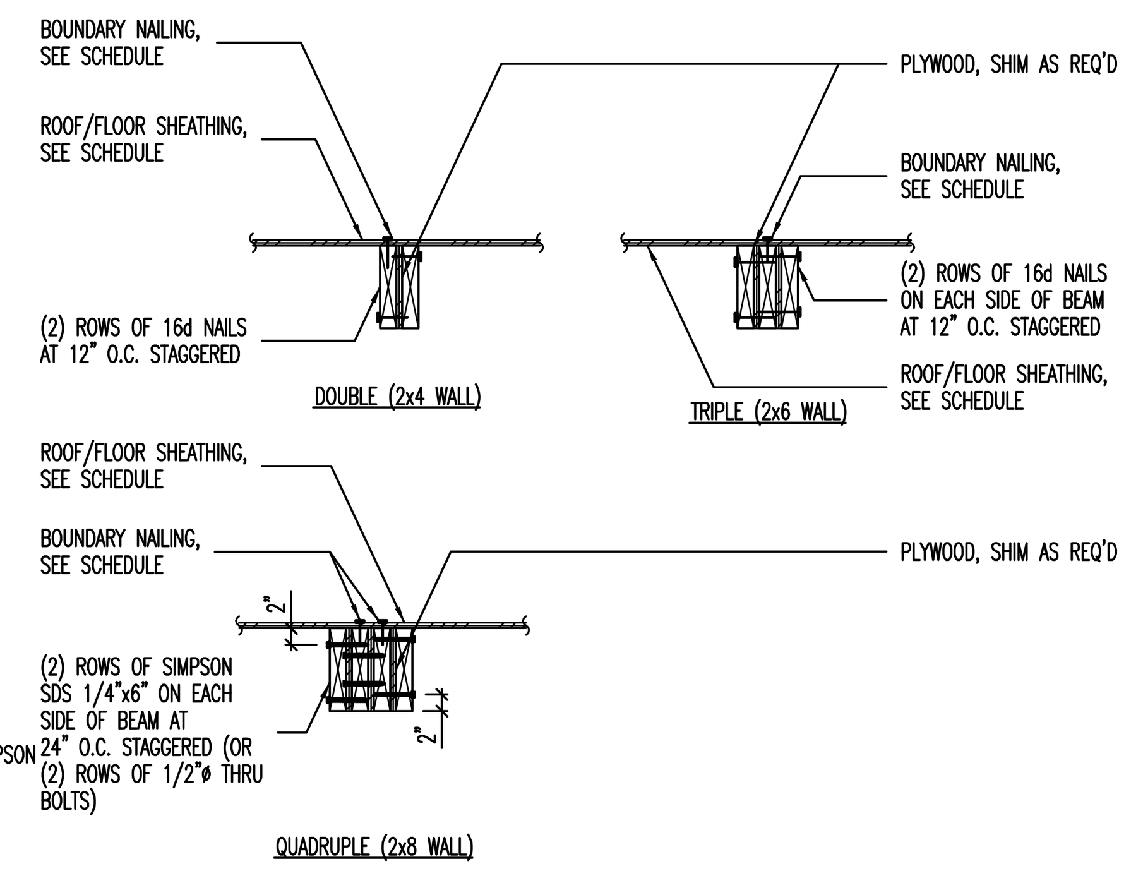
ROOF FAMING DETAILS

S511

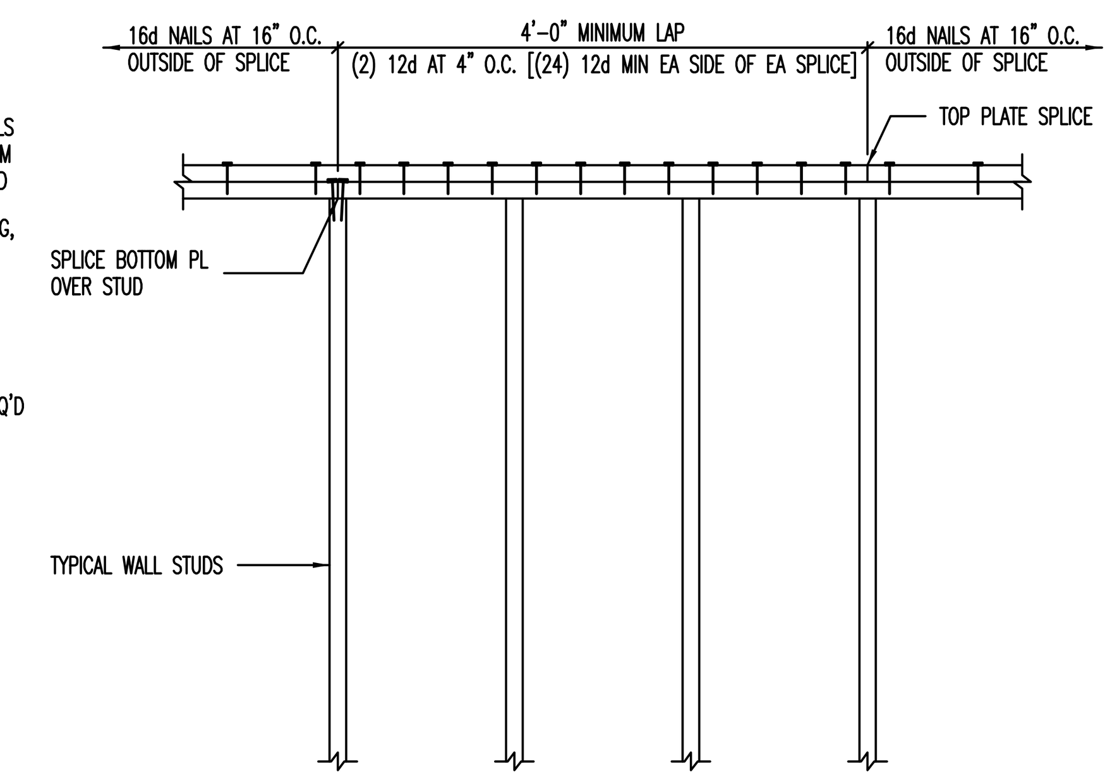


NOTES:
1. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATION AND SIZE OF OPENINGS.

1 FRAMING AT CONVENTIONALLY FRAMED ROOF OPENINGS [PLAN VIEW]
38917-00 NO SCALE



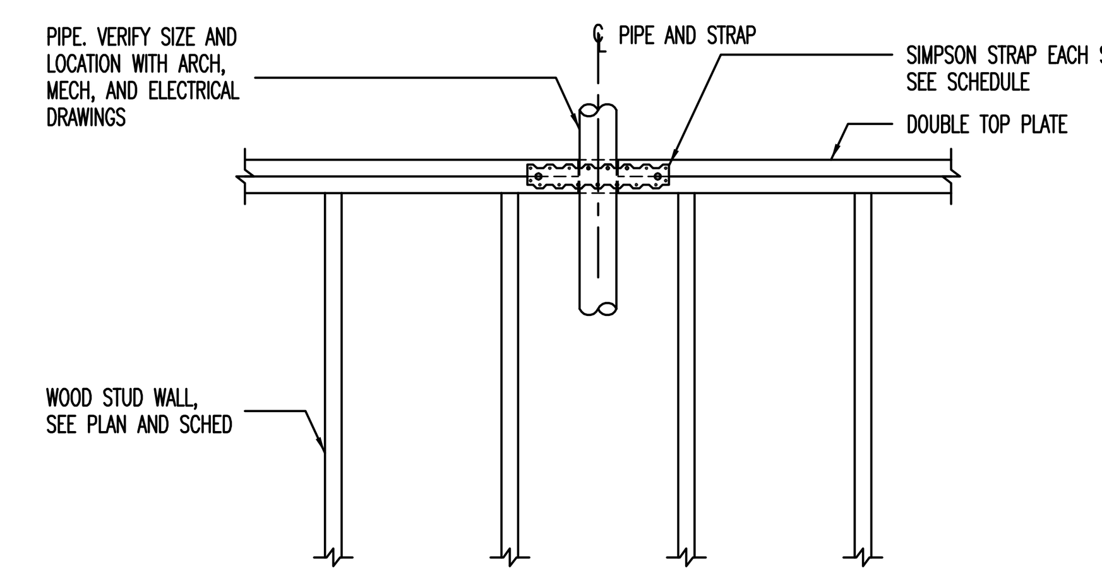
2 BUILT-UP DROP BEAM DETAILS
34944-00 NO SCALE



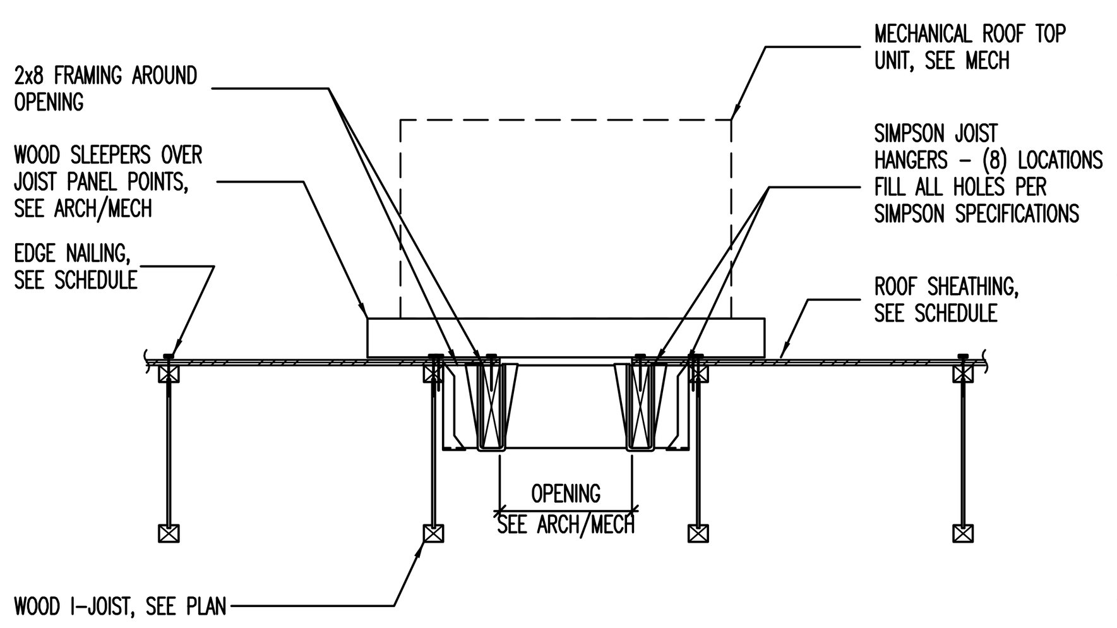
3 TYPICAL TOP PLATE SPLICE DETAIL
39424-00 NO SCALE

TOP PLATE SPLICE

HOLE SIZE	STRAPS
LESS THAN OR EQUAL TO 1/3 STUD WIDTH	NONE REQUIRED
GREATER THAN 1/3 AND LESS THAN OR EQUAL TO 2/3 STUD WIDTH	ST2215 WITH (4) 16dX3.1/2" NAILS EACH END
GREATER THAN 2/3 STUD WIDTH	ST2215 WITH (6) 16dX3.1/2" NAILS EACH END

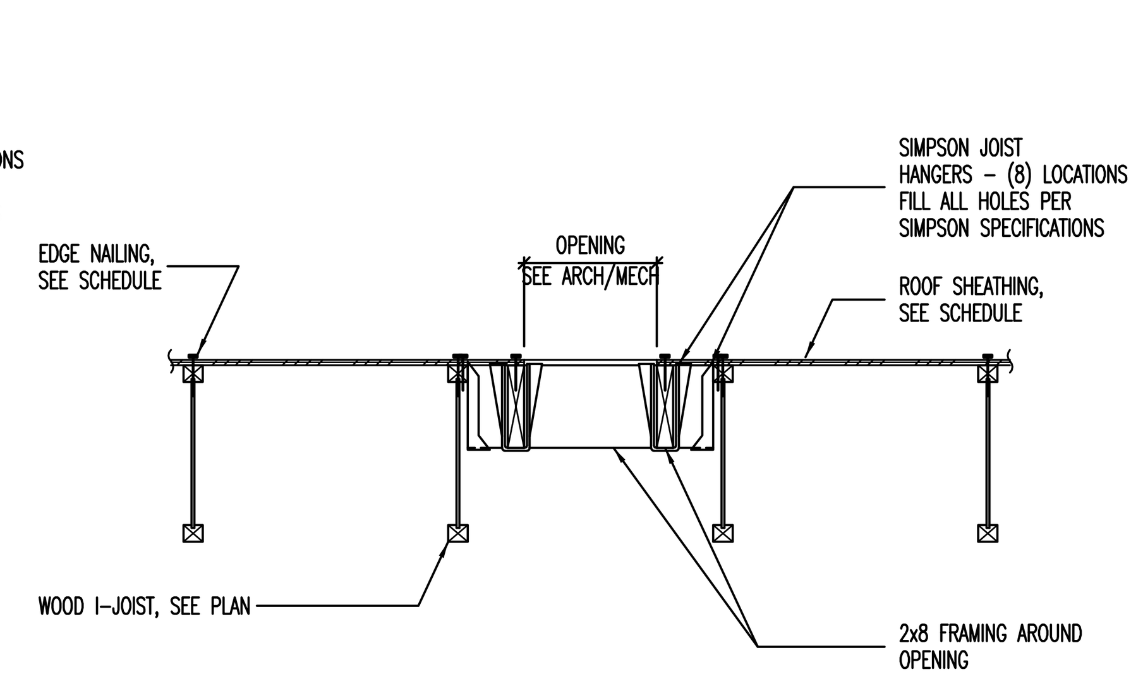


4 TOP PLATE SPLICE SCHEDULE AT PIPE
39424-01 NO SCALE



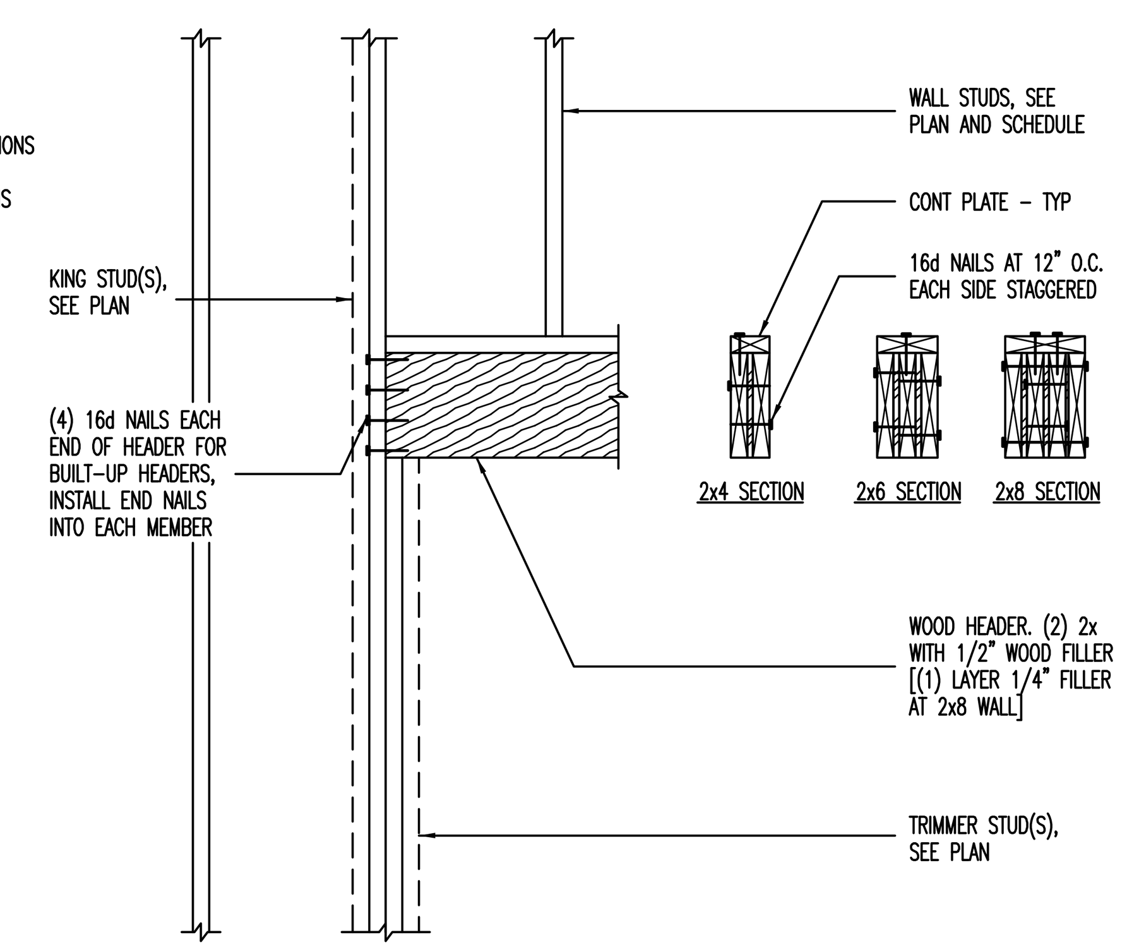
NOTE: SEE PLAN FOR ADD LOADS TO JOISTS

5 TYPICAL MECHANICAL UNIT SUPPORT DETAIL
2052-00 NO SCALE

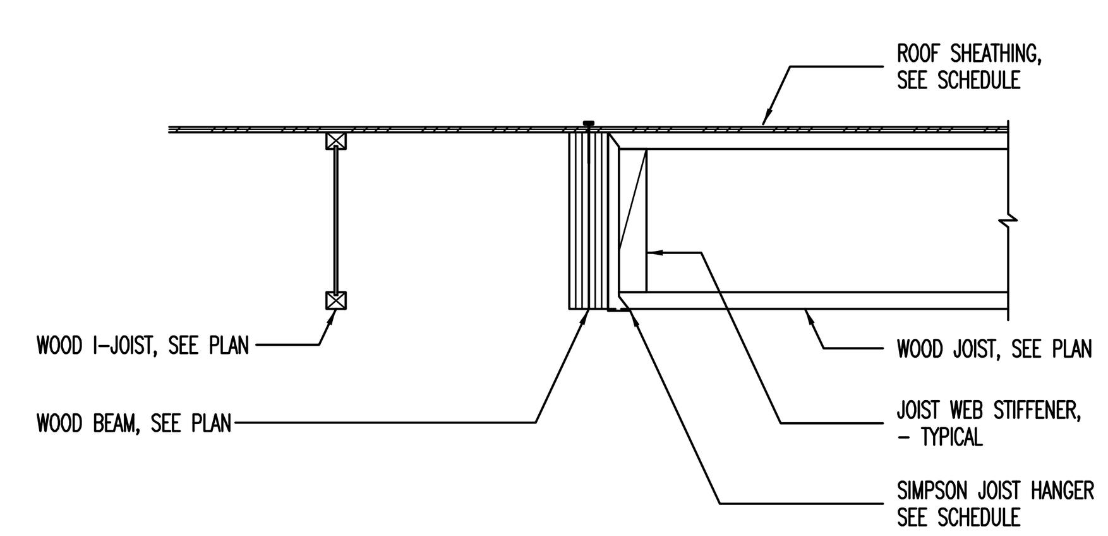


NOTE: SEE PLAN FOR ADD LOAD TO JOISTS.

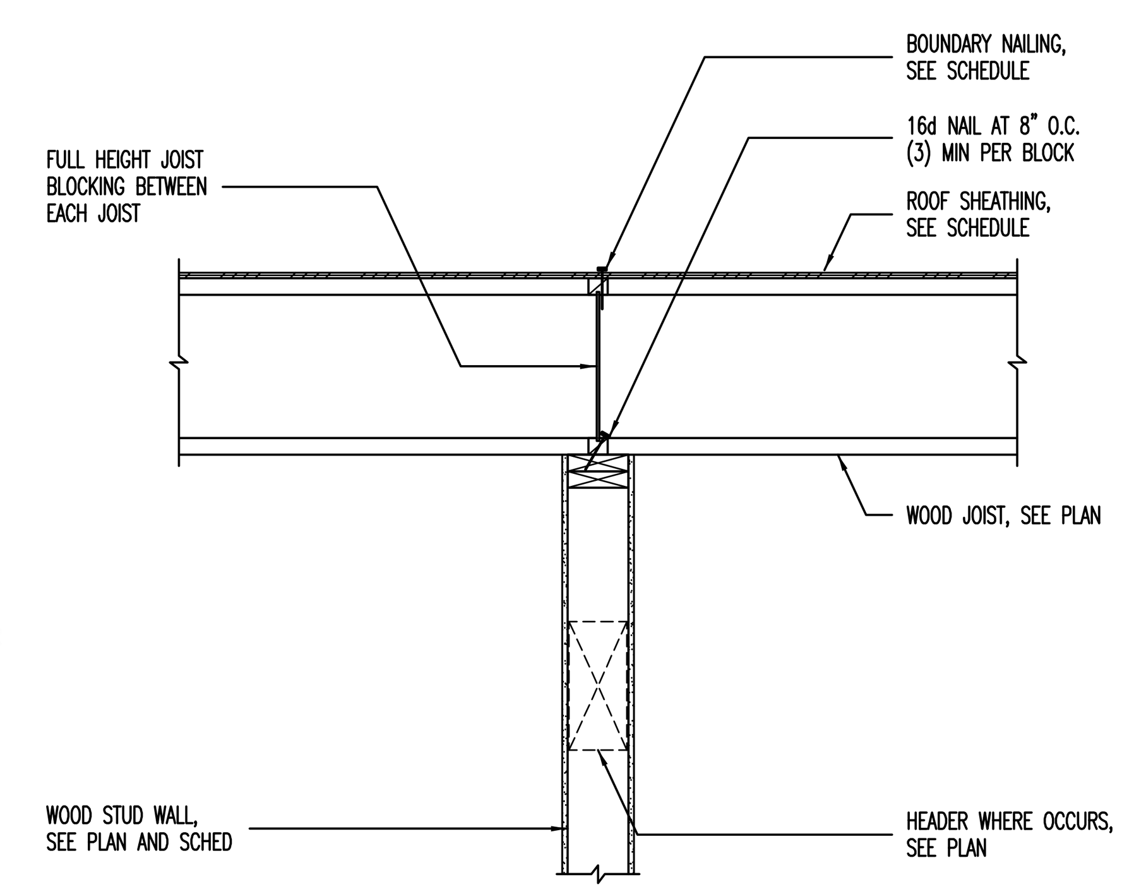
6 TYPICAL ROOF OPENING DETAIL
2052-03 NO SCALE



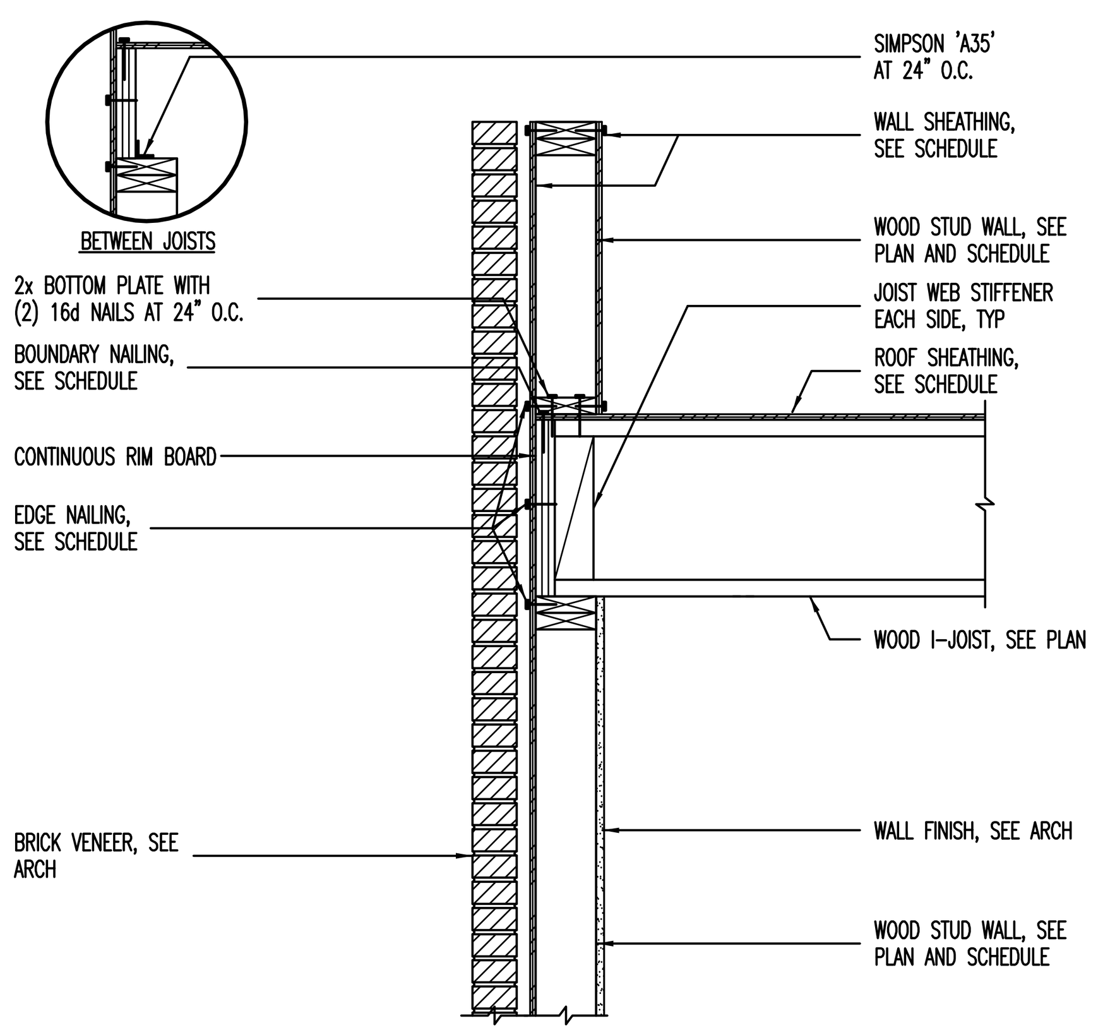
7 WOOD STUD HEADER BEARING SCHEDULE
33408-03 NO SCALE



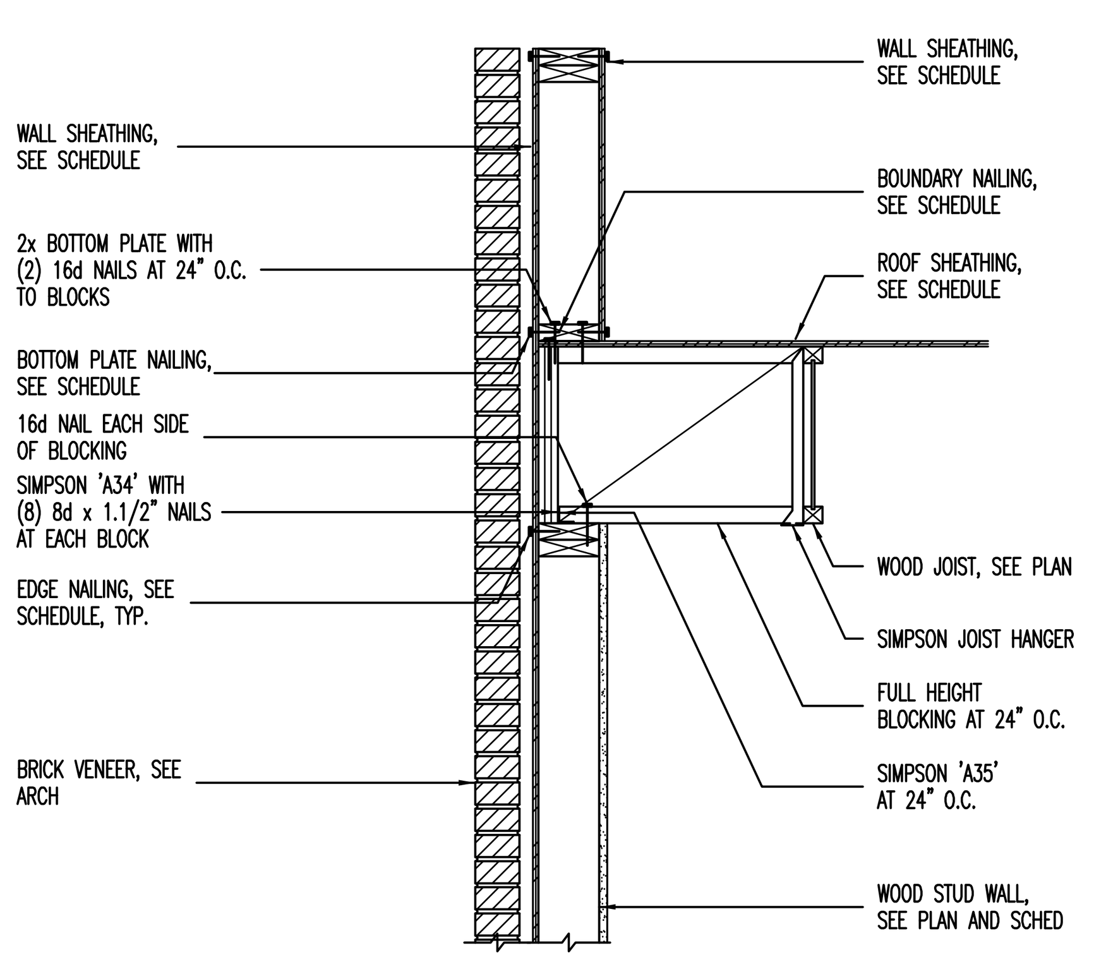
8 TYPICAL WOOD JOISTS BEARING AT WOOD BEAM
2244-00 NO SCALE



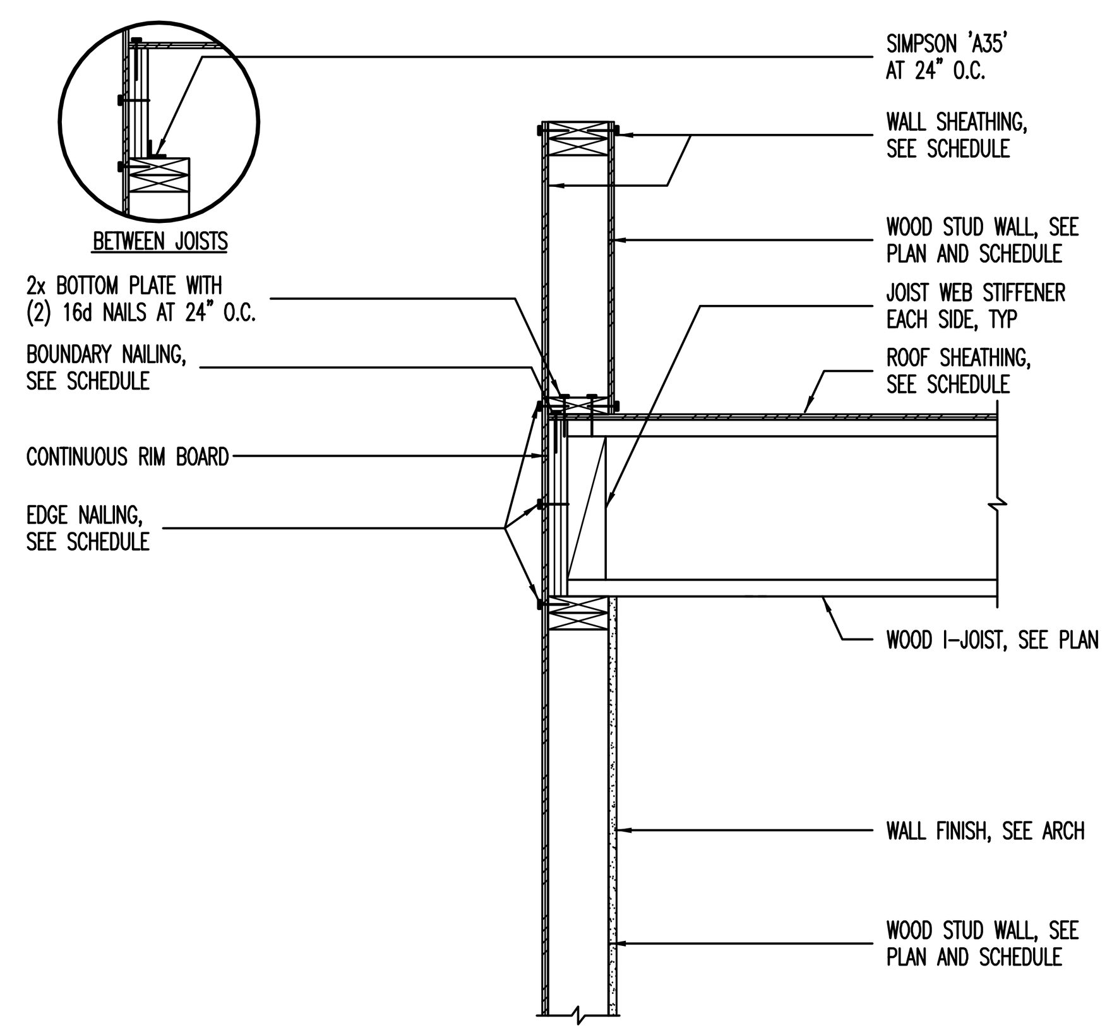
9 ROOF JOIST BEARING AT INTERIOR WOOD STUD WALL
35334-04 NO SCALE



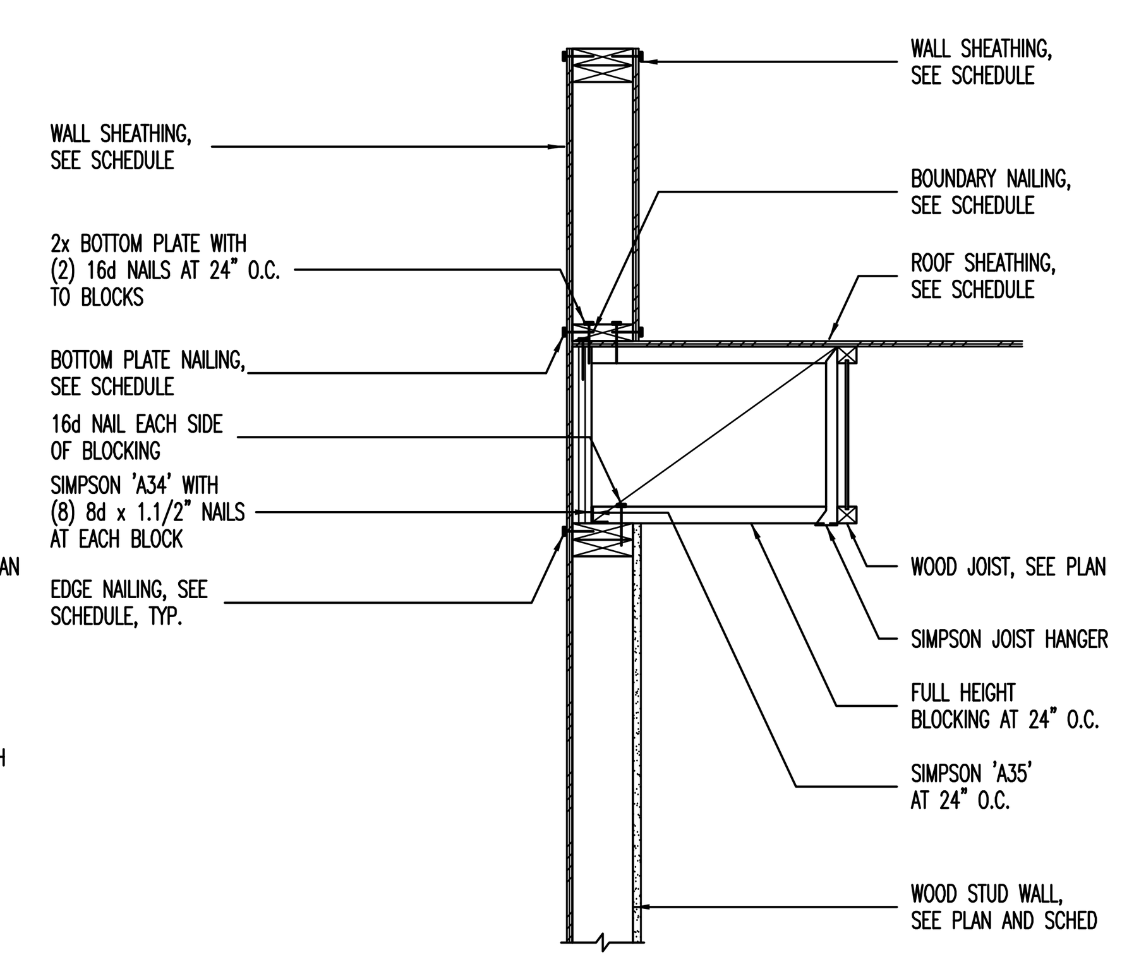
10 JOIST BEARING AT WOOD STUD WALL WITH PARAPET
35332-01 NO SCALE



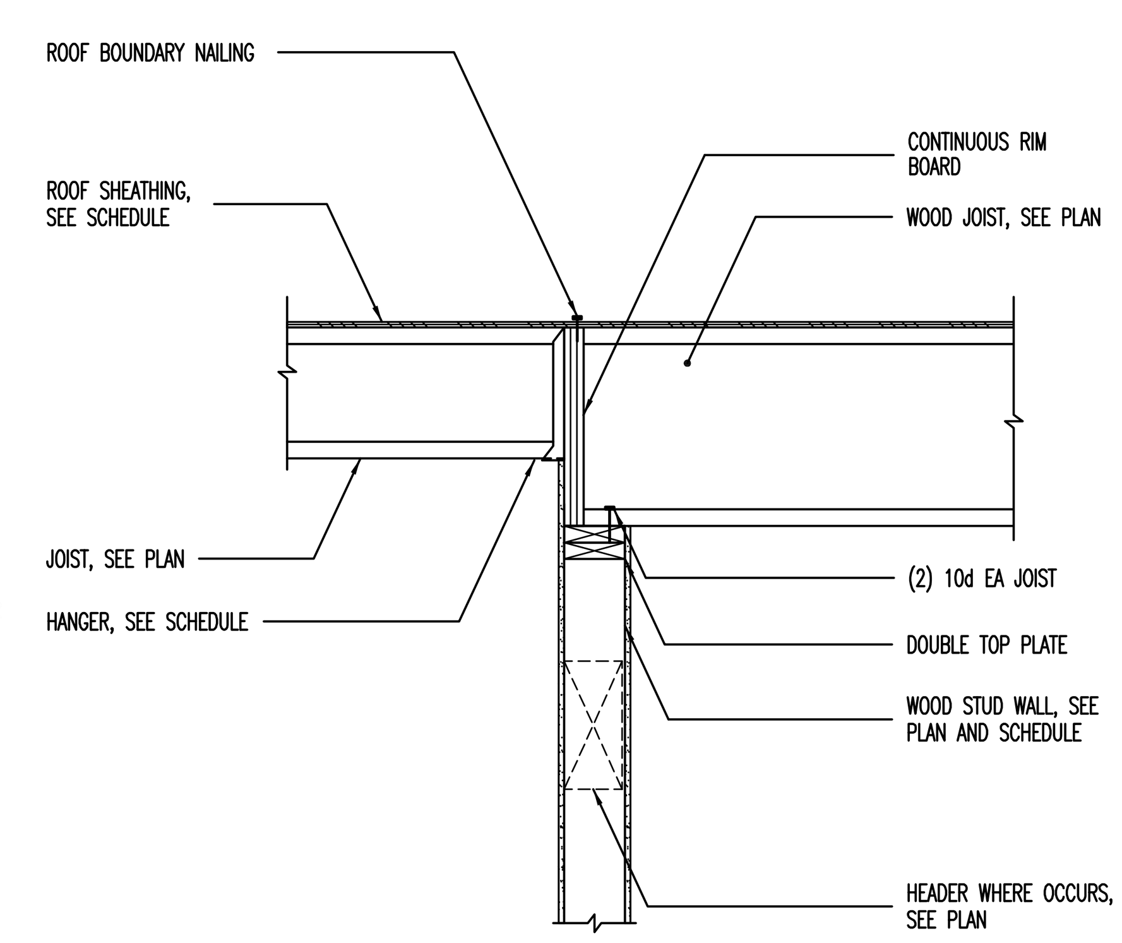
11 JOIST BEARING AT STUD WALL WITH PARAPET
35334-03 NO SCALE



12 JOIST BEARING AT WOOD STUD WALL WITH PARAPET
35332-01 NO SCALE



13 JOIST BEARING AT STUD WALL WITH PARAPET
35334-03 NO SCALE



14 ROOF JOIST BEARING AT INTERIOR WOOD STUD WALL
09091S511 NO SCALE

CONSTRUCTION DOCUMENTS

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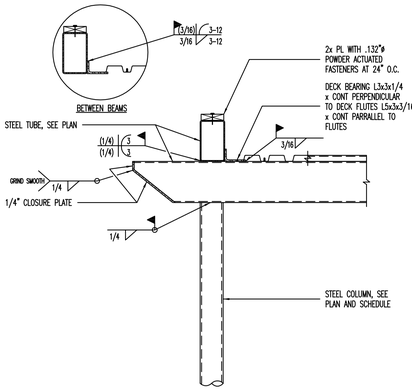
PROJECT #. 10314

ROOF FAMING DETAILS

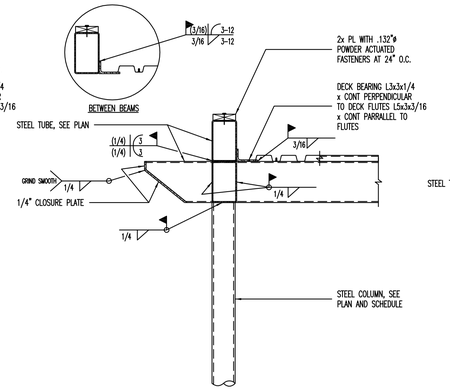
S512



1 STEEL TUBE AT STEEL COLUMN

1024_S-513

NO SCALE



2 STEEL TUBE AT STEEL COLUMN

1024_S-513

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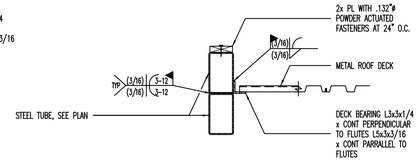

3 METAL DECK AT STEEL TUBES

1024_S-513

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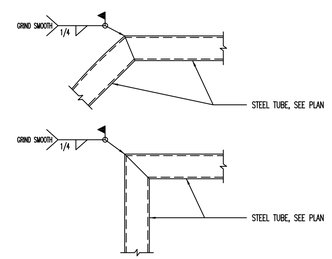
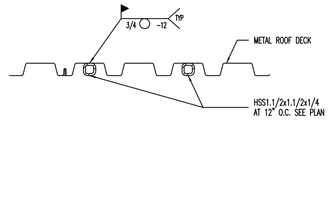


4 CORNERS AT STEEL CANOPYS

1024_S-513

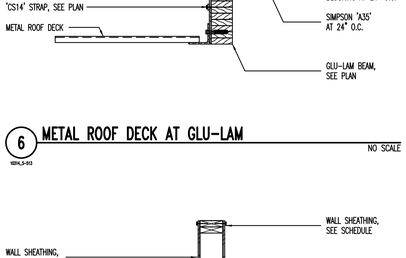
NO SCALE



5 STEEL TUBE AT STEEL DECK

1024_S-513

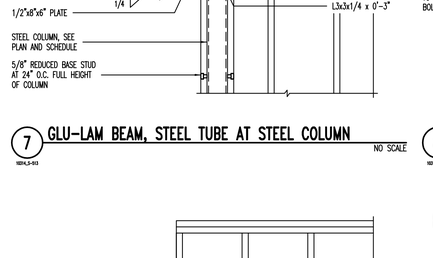
NO SCALE



6 METAL ROOF DECK AT GLU-LAM

1024_S-513

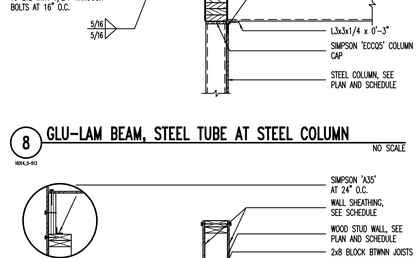
NO SCALE



7 GLU-LAM BEAM, STEEL TUBE AT STEEL COLUMN

1024_S-513

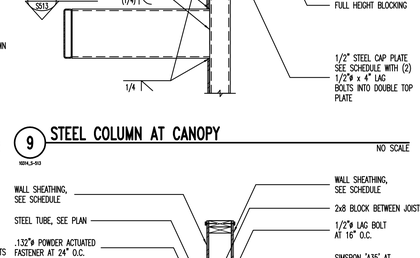
NO SCALE



8 GLU-LAM BEAM, STEEL TUBE AT STEEL COLUMN

1024_S-513

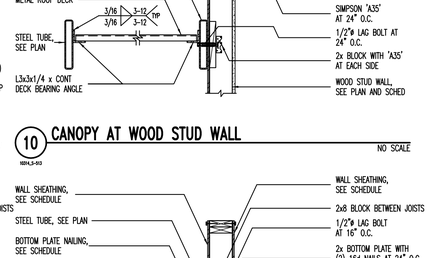
NO SCALE



9 STEEL COLUMN AT CANOPY

1024_S-513

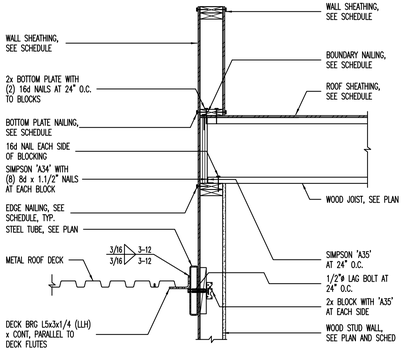
NO SCALE



10 CANOPY AT WOOD STUD WALL

1024_S-513

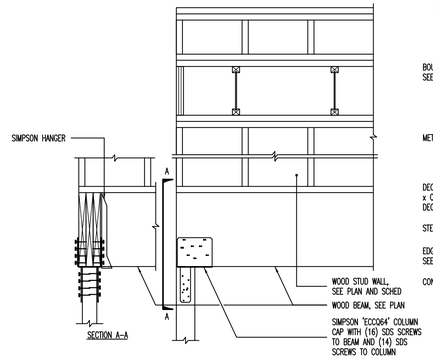
NO SCALE



11 CANOPY AT WOOD STUD WALL

1024_S-513

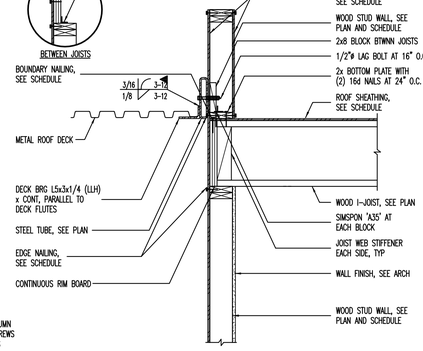
NO SCALE



12 WOOD BEAMS AT CORNER WOOD POST

1024_S-513

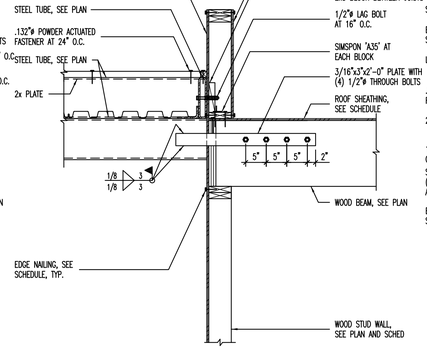
NO SCALE



13 STEEL TUBE/JOIST BEARING AT WOOD STUD WALL WITH PARAPET

3030-01

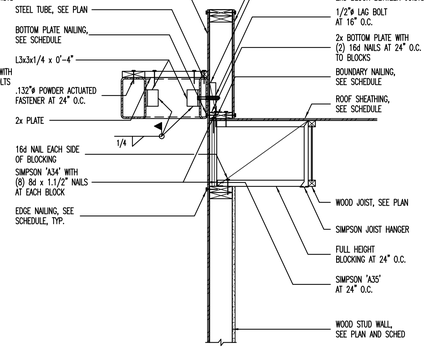
NO SCALE



14 STEEL TUBE TO WOOD BEAM DRAG CONNECTION

3034-01

NO SCALE



15 STEEL TUBE/JOIST BEARING AT STUD WALL WITH PARAPET

3034-01

NO SCALE

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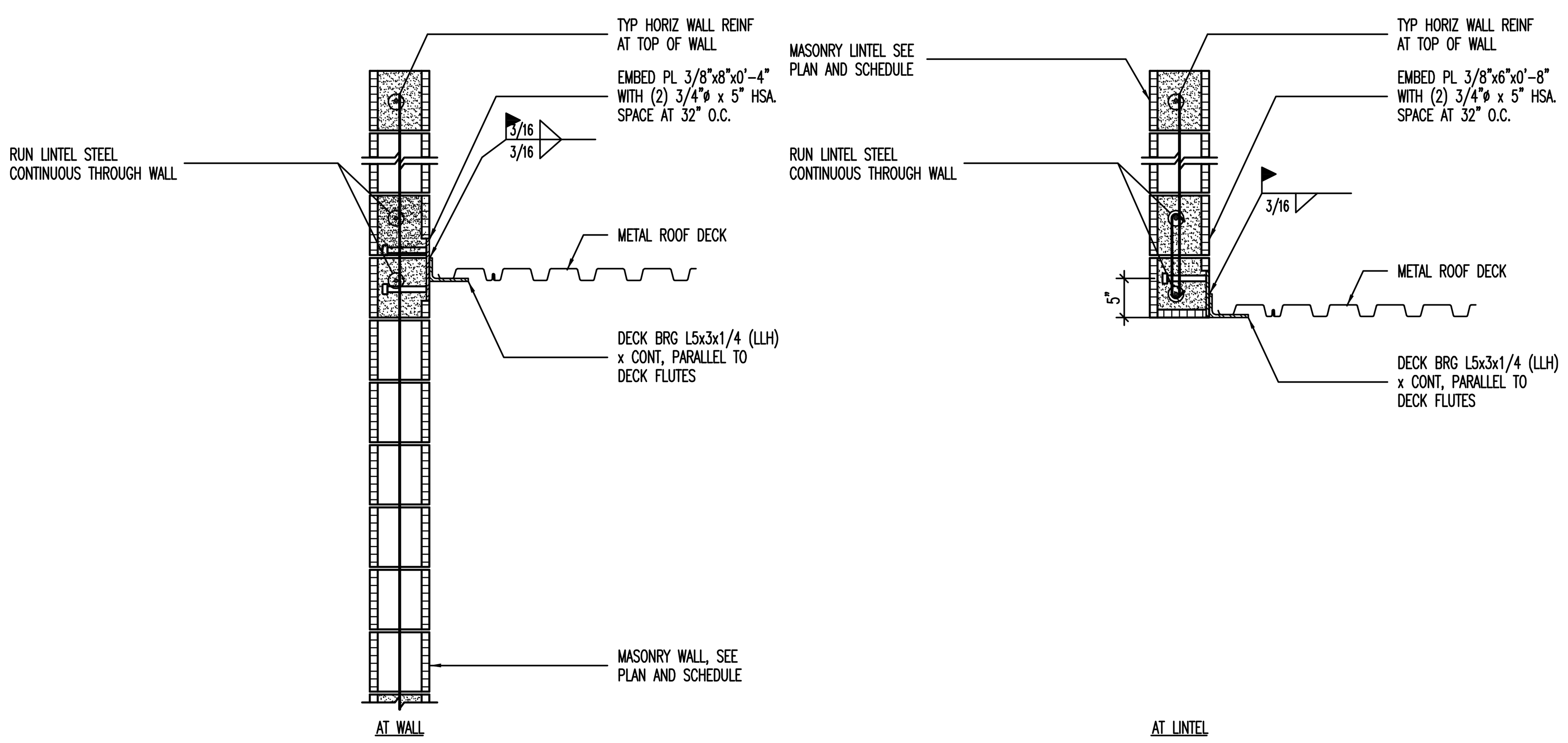
ROOF FAMING DETAILS

S513

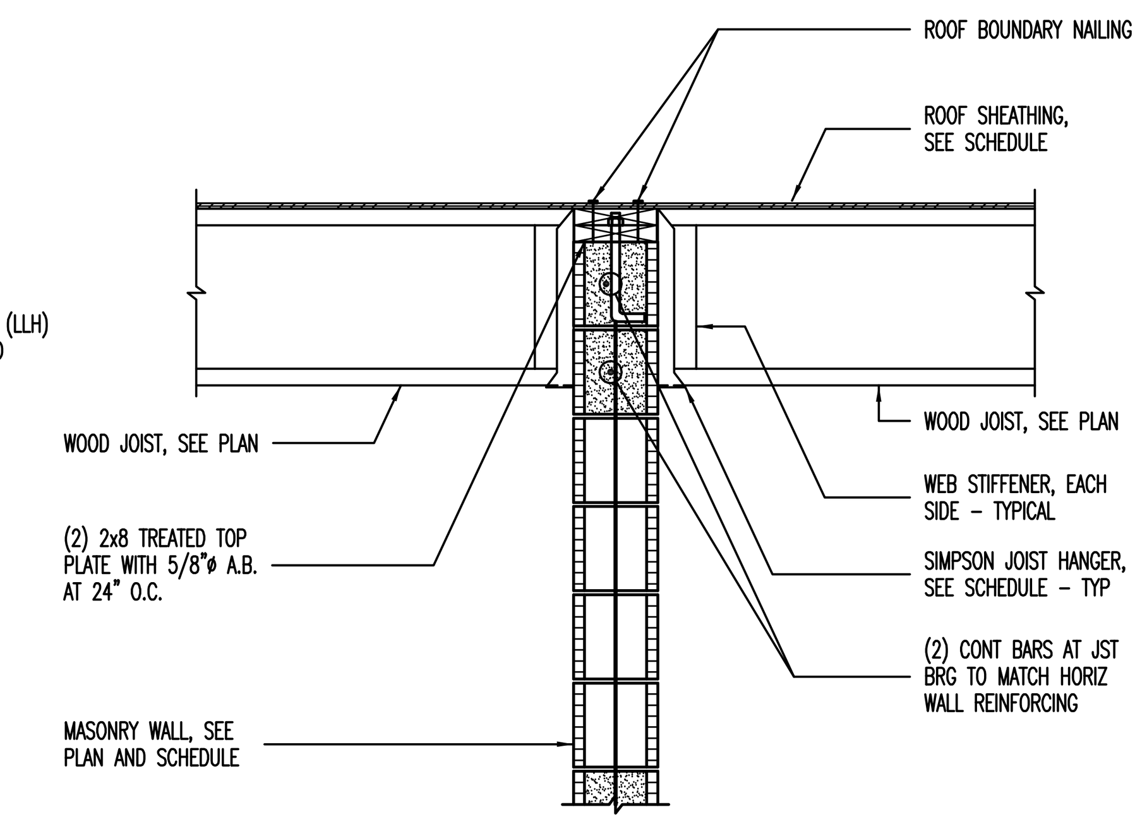


1 DECK BEARING AT MASONRY WALL

NO SCALE

526848-22

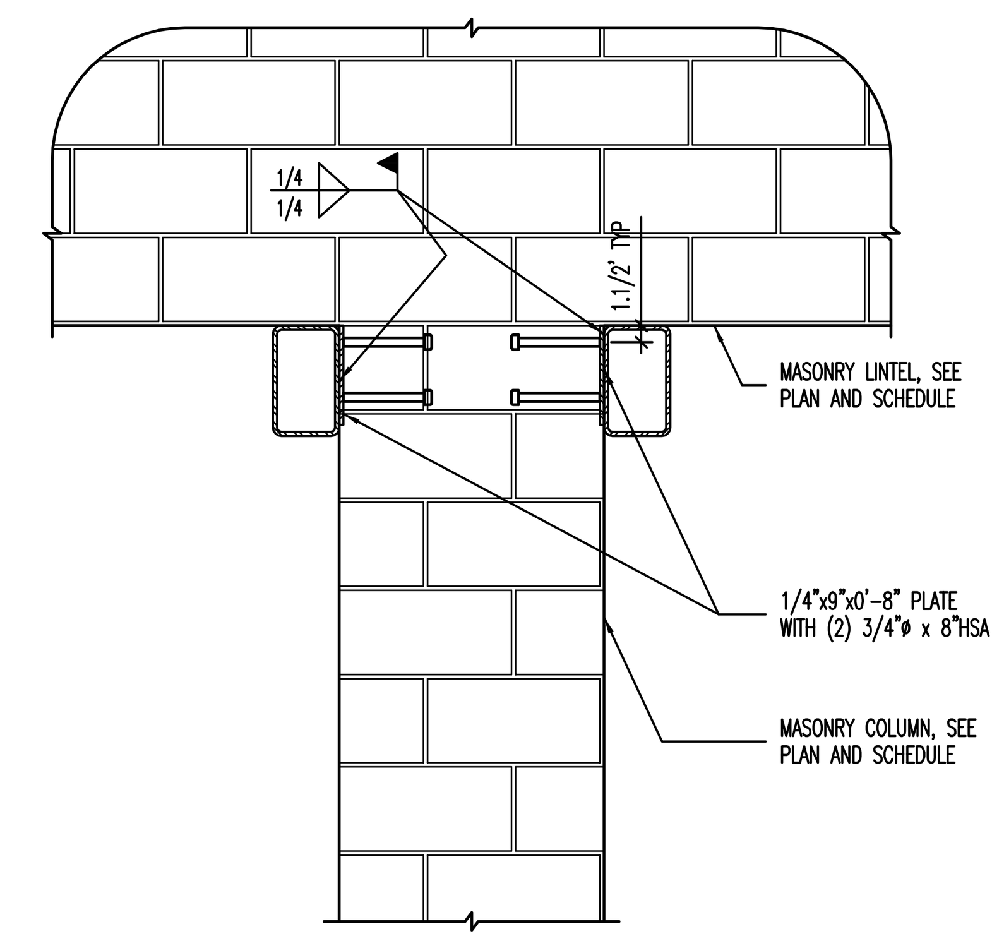
526848-22



2 WOOD JOIST BEARING AT MASONRY WALL

NO SCALE

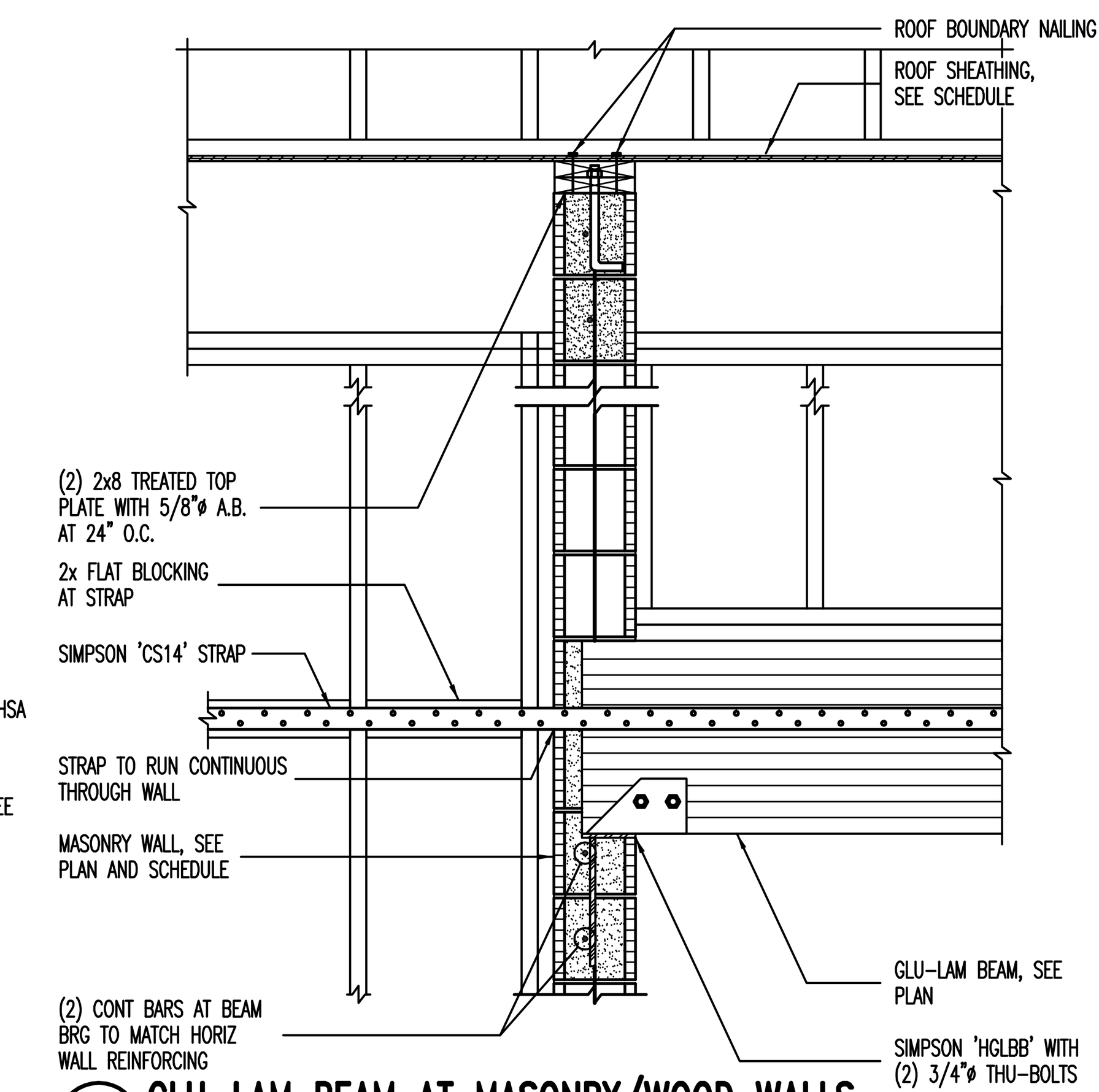
526852-24



3 STEEL TUBES AT MASONRY COLUMN

NO SCALE

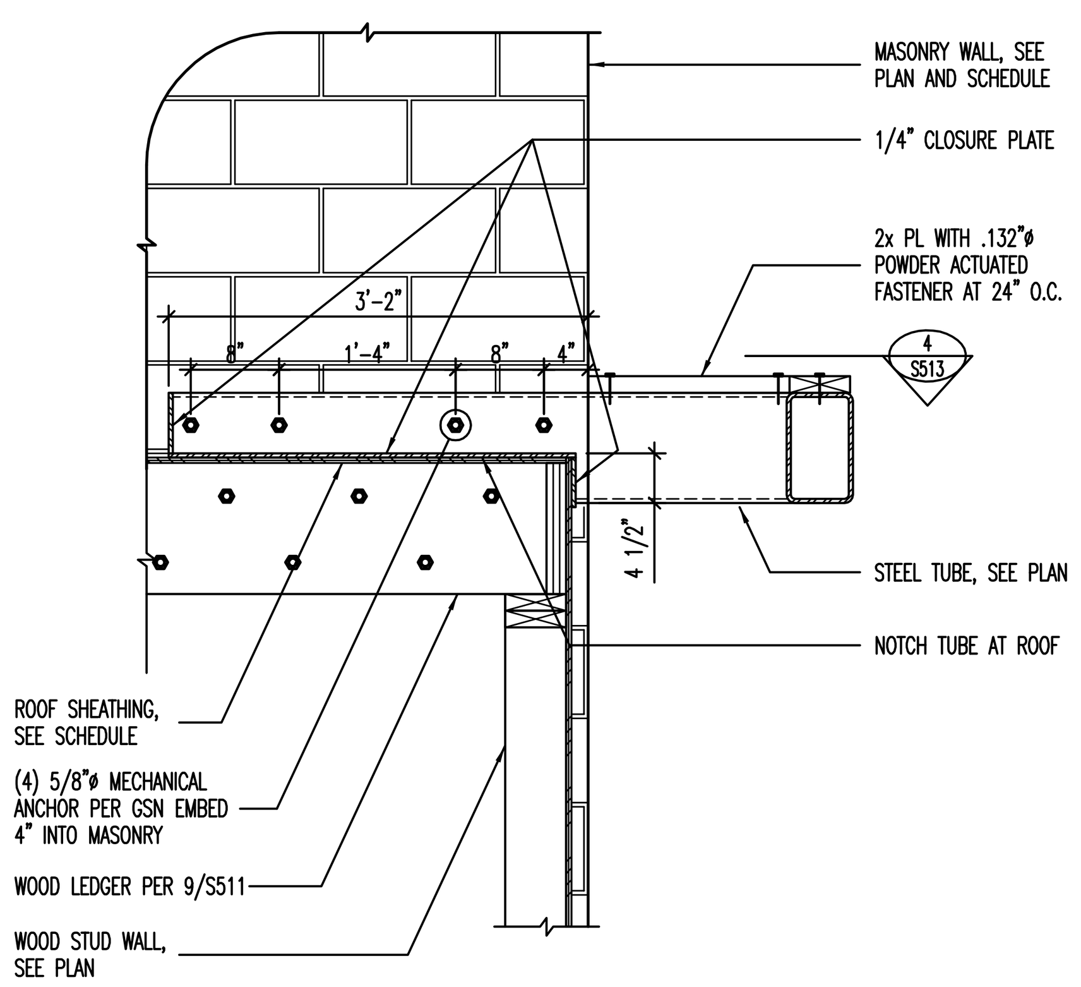
10314_S-514



6 GLU-LAM BEAM AT MASONRY/WOOD WALLS

NO SCALE

527044-21



7 CANTILEVERED TUBE ABOVE LOW ROOF AT MASONRY WALL

NO SCALE

10314_S-514

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PROJECT #. 10314

ROOF FAMING DETAILS

S514

CONCRETE FOOTING SCHEDULE

MARK	WIDTH	LENGTH	DEPTH	REINFORCING CROSSWISE				REINFORCING LENGTHWISE				COMMENTS
				No.	SIZE	LENGTH	SPACING	No.	SIZE	LENGTH	SPACING	
FTS2.0	2'-0"	CONT	12"	–	–	–	–	3	#4	CONT	EQ	THICKENED SLAB
FC1.5	1'-6"	CONT	12"	–	–	–	–	2	#5	CONT	EQ	.
FC2.0	2'-0"	CONT	12"	–	–	–	–	3	#4	CONT	EQ	
FC2.5	2'-6"	CONT	12"	–	#5	2'-0"	14"	3	#5	CONT	EQ	
FC3.0	3'-0"	CONT	12"	–	#5	2'-6"	14"	3	#5	CONT	EQ	
FC3.5	3'-6"	CONT	12"	–	#5	3'-0"	14"	3	#5	CONT	EQ	
FS3.0	3'-0"	3'-0"	12"	3	#5	2'-6"	EQ	3	#5	2'-6"	EQ	
FS3.5	3'-6"	3'-6"	12"	3	#5	3'-0"	EQ	3	#5	3'-0"	EQ	
FS4.0	4'-0"	4'-0"	12"	4	#5	3'-6"	EQ	4	#5	3'-6"	EQ	

CONCRETE FOOTING NOTES:
1. PLACE ALL FOOTING REINFORCING IN THE BOTTOM OF THE FOOTING WITH 3" CLEAR CONCRETE COVER (UNO).
2. TOP REINFORCING, WHERE OCCURS, SHALL BE PLACED IN THE TOP OF THE FOOTING WITH 2" MINIMUM CONCRETE COVER.
3. IF FOOTINGS ARE EARTH–FORMED, FOOTINGS SHALL BE 6" LONGER AND WIDER THAN SCHEDULED.
4. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.
5. SOME SCHEDULED FOOTINGS MAY NOT BE USED, SEE FOOTING AND FOUNDATION PLAN FOR FOOTING MARKS.

1 CONCRETE FOOTING SCHEDULE
NO SCALE

SCHED_CONC_FTG-C2500-S1500

CONCRETE WALL SCHEDULE

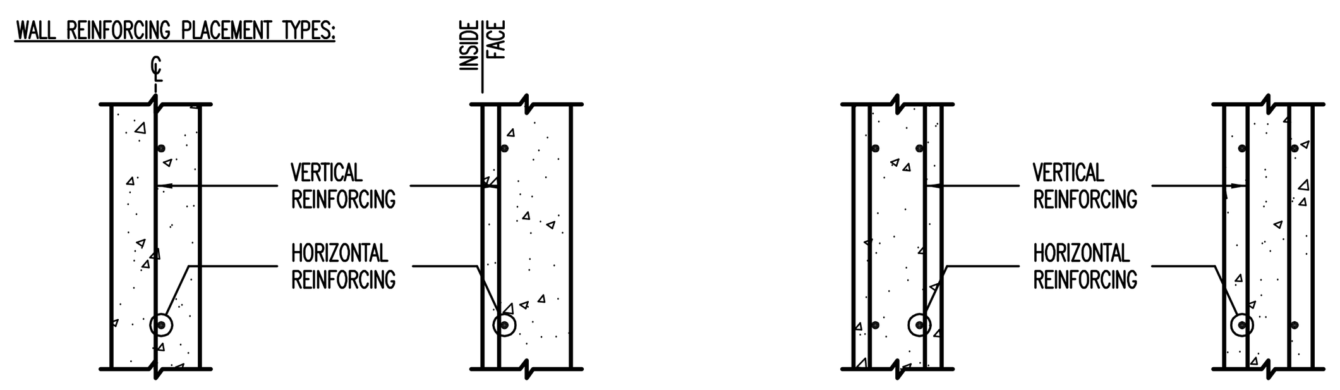
MARK	THICKNESS	REINFORCING			WALL TYPE	COMMENTS
		VERTICAL	HORIZONTAL	TOP AND BOTTOM		
CW-8A	8"	#4 AT 18" O.C.	#4 AT 12" O.C.	#5 BAR	A	.
CW-9A	9"	#4 AT 18" O.C. E.F.	#4 AT 16" O.C.	#5 BAR	C	
CW-12A	12"	#4 AT 18" O.C. E.F.	#4 AT 16" O.C.	(2) #5 BARS	C	

CONCRETE FOUNDATION WALL NOTES:
1. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.
2. CONCRETE FOUNDATION WALLS NOT DESIGNATED ON PLANS SHALL BE REINFORCED AS FOLLOWS:

THICKNESS	VERTICAL REINFORCING	HORIZONTAL REINFORCING
6"	#4 BARS AT 18" O.C.	#4 BARS AT 16" O.C.
8"	#4 BARS AT 18" O.C.	#4 BARS AT 12" O.C.
10"	#4 BARS AT 16" O.C.	#5 BARS AT 15" O.C.
12"	#4 BARS AT 18" O.C. E.F.	#4 BARS AT 16" O.C. E.F.

ABBREVIATIONS:
E.F. EACH FACE
I.F. INSIDE FACE
O.F. OUTSIDE FACE

WALL REINFORCING PLACEMENT TYPES:



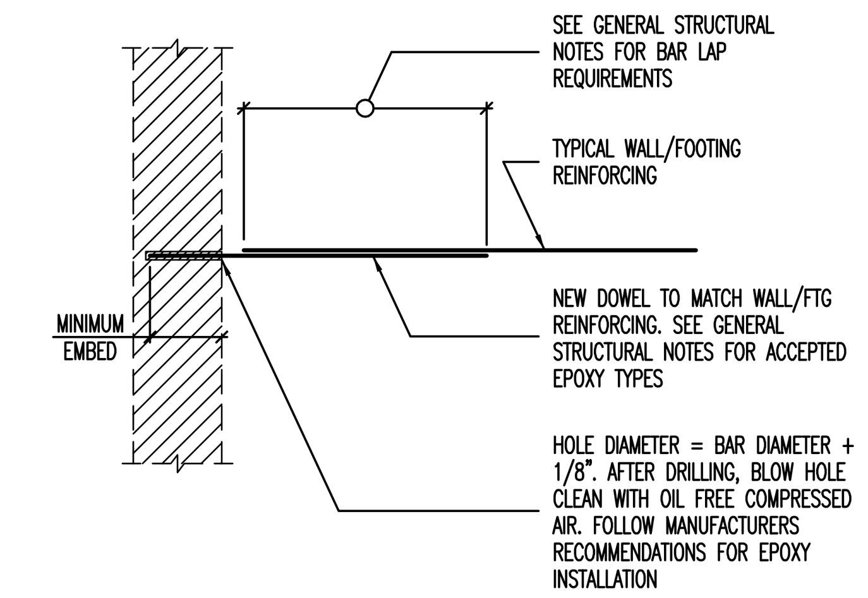
TYPE 'A' TYPE 'B' TYPE 'C' TYPE 'D'

3 CONCRETE WALL SCHEDULE
NO SCALE

SCHED_CONC_WALL-01

EPOXY DOWEL EMBED SCHEDULE

DOWEL SIZE	MINIMUM EMBEDMENT INTO EXISTING CONCRETE
#4	6.1/2"
#5	7.1/2"
#6	10"
#7	1'-1"
#8	1'-4"



5 EPOXY DOWEL EMBED SCHEDULE
NO SCALE

SCHED_CONC_EPOXY-01

CONCRETE REINFORCING BAR LAP SPLICE SCHEDULE

BAR SIZE	f'c = 3000psi				f'c = 4000psi				f'c = 5000psi				f'c = 6000psi			
	REGULAR		TOP		REGULAR		TOP		REGULAR		TOP		REGULAR		TOP	
	CLASS		CLASS		CLASS		CLASS		CLASS		CLASS		CLASS		CLASS	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
#3	13"	17"	17"	21"	12"	16"	16"	21"	12"	16"	16"	21"	12"	16"	16"	21"
#4	17"	22"	22"	28"	15"	19"	19"	25"	13"	17"	17"	22"	12"	16"	16"	21"
#5	21"	27"	27"	35"	18"	24"	24"	31"	16"	21"	21"	27"	15"	19"	19"	25"
#6	27"	36"	36"	46"	24"	31"	31"	40"	21"	28"	28"	36"	20"	25"	25"	33"
#7	37"	48"	48"	63"	32"	42"	42"	54"	29"	38"	38"	49"	27"	34"	34"	44"
#8	49"	64"	64"	82"	42"	55"	55"	71"	38"	49"	49"	64"	35"	45"	45"	58"
#9	62"	80"	80"	104"	54"	70"	70"	90"	48"	62"	62"	81"	44"	57"	57"	74"
#10	78"	102"	102"	132"	68"	88"	88"	115"	61"	79"	79"	102"	56"	72"	72"	94"
#11	96"	125"	125"	162"	83"	108"	108"	141"	76"	97"	97"	126"	68"	88"	88"	115"

CONCRETE REINFORCING BAR LAP SPLICE NOTES:
1. THIS SCHEDULE SHALL BE USED FOR ALL BAR SPLICES IN CONCRETE WALLS, UNLESS NOTED OTHERWISE.
2. CLASS 'A' SPLICES MAY BE USED ONLY IN CASES WHERE 50% OR LESS OF THE BARS ARE SPLICED WITHIN THE LAP SPLICE LENGTH.
3. CLASS 'B' SPLICES SHALL BE USED FOR ALL SPLICES UNLESS THE REQUIREMENTS OF NOTE No. 2 ABOVE ARE MET.
4. TIES AND STIRRUPS SHALL NOT BE SPLICED.
5. SPLICES FOR BUNDLED BARS:
   a. FOR BUNDLED BARS OF THREE OR LESS, LAP SPLICE LENGTHS SHALL BE MULTIPLIED BY 1.2.
   b. FOR BUNDLED BARS OF FOUR OR MORE, LAP SPLICE LENGTHS SHALL BE MULTIPLIED BY 1.33.
   c. INDIVIDUAL BAR SPLICES WITHIN A BUNDLE SHALL NOT OVERLAP.
   d. ENTIRE BUNDLES SHALL NOT BE LAP SPLICED.
6. FOR ALL LIGHTWEIGHT CONCRETE, LAP LENGTHS SHALL BE MULTIPLIED BY 1.3.
7. FOR ALL EPOXY COATED BARS, LAP LENGTHS SHALL BE MULTIPLIED BY 1.3 FOR TOP BARS AND 1.5 FOR REGULAR BARS.
8. TOP BARS ARE CLASSIFIED AS HORIZONTAL BARS WHERE 12", OR MORE, OF FRESH CONCRETE IS CAST BELOW THE REINFORCING BAR.
9. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

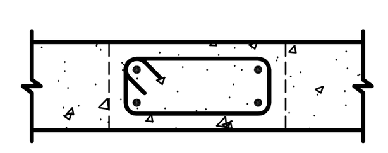
2 CONCRETE REINFORCING BAR LAP SPLICE SCHEDULE
NO SCALE

SCHED_CONC_REINF-01

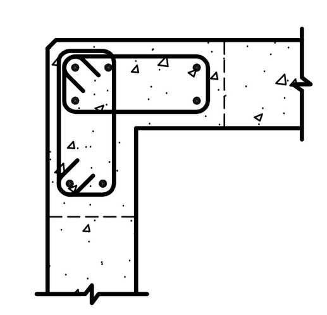
CONCRETE PIER SCHEDULE

MARK	PIER SIZE	REINFORCING		TYPE	COMMENTS
		VERTICAL	TIES		
CP-16A	WT x 16"	(4) #5 BARS	#3 AT 8" O.C.	A	.
CP-16B	WT x 16"	(7) #4 BARS	(2) #3 AT 8" O.C.	B	

CONCRETE PIER NOTES:
1. INSTALL (3) SETS OF TIES WITHIN TOP 5" OF ALL PIERS (UNO).
2. RUN HORIZONTAL CONCRETE WALL REINFORCING CONTINUOUS THROUGH PIER WHEN PIER IS POURED MONOLITHICALLY WITH CONCRETE WALL.
3. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.



TYPE "A"



TYPE "B"

4 CONCRETE PIER SCHEDULE
NO SCALE

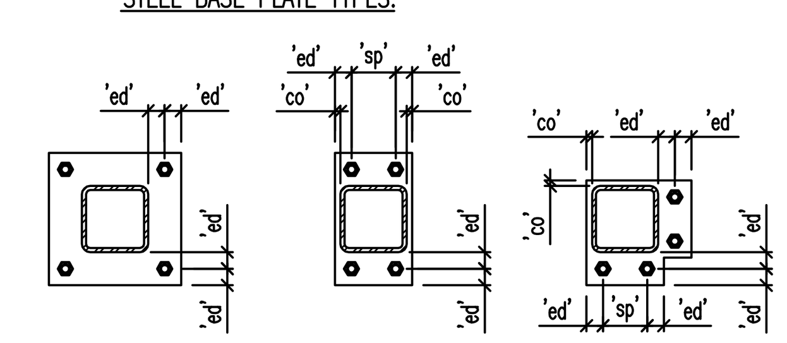
SCHED_CONC_PIER-01

STEEL COLUMN SCHEDULE

MARK	SIZE	STEEL BASE PLATE	STEEL CAP PLATE	COMMENTS
SC-3.5A	HSS3.1/2x3.1/2x1/4	3/4" (SBP-3)	NONE	.
SC-5A	HSS5x2x1/4	3/4" (SBP-2)	1/2" (SCP-1)	
SC-5B	5" STD PIPE	3/4" (SBP-1)	NONE	
SC-5C	HSS5x5x5/16	3/4" (SBP-2)	1/2" (SCP-1)	

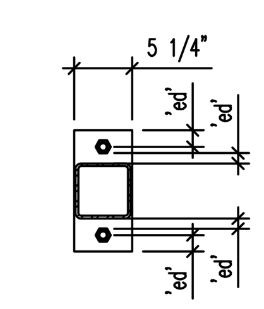
STEEL COLUMN NOTES:
1. UNLESS NOTED OTHERWISE, ALL COLUMNS SHALL BE INSTALLED WITH (4) 3/4"ø ANCHOR RODS WITH 3" MINIMUM HOOKS. PROJECT ANCHOR RODS 3" MINIMUM ABOVE THE TOP OF THE BASE PLATE. EMBEDMENT SHALL BE 9" MINIMUM. ALL RODS SHALL BE INSTALLED WITH HARDENED WASHERS BENEATH THE NUT. ANY BOLT HOLES LARGER THAN THE ROD DIAMETER PLUS 5/16" SHALL HAVE 5/16" PLATE WASHERS INSTALLED BENEATH THE HARDENED WASHERS.
2. ANCHOR RODS SHALL NOT BE WELDED (INCLUDING TACK WELDS).
3. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.
4. SEE DETAIL 6/S503 FOR COLUMNS EMBEDDED IN WOOD STUD WALLS.

STEEL BASE PLATE TYPES:



BASE PLATE SBP-1 BASE PLATE SBP-2 BASE PLATE SBP-3

STEEL CAP PLATE TYPES:



CAP PLATE SCP-1

PLATE LEGEND
co = 1/2" MINIMUM
ed = 1.1/2" MINIMUM
sp = 3" MINIMUM
bc = BEAM OR GIRDER GAGE
w = BEAM OR GIRDER GAGE + 3"
OR
BEAM OR GIRDER WIDTH + 1"
OR
COLUMN WIDTH + 1"
WHICHEVER IS GREATER

6 STEEL COLUMN SCHEDULE
NO SCALE

SCHED_STL_COL-01

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DATE/REVISION 11 · 24 · 10
PROJECT #. 10314

CONCRETE AND STEEL SCHEDULES

S601

MASONRY WALL SCHEDULE

MARK	THICKNESS	MATERIAL	SOLID GROUT	REINFORCING			COMMENTS
				VERTICAL	HORIZONTAL	JOINTS	
MW-8A	8"	CMU	YES	#5 BAR AT 32" O.C.	SEE HORIZ SCHED BLW	NONE	.
MW-8B	8"	CMU	YES	#5 BAR AT 24" O.C.	SEE HORIZ SCHED BLW	NONE	
MW-8C	8"	CMU	YES	#5 BAR AT 32" O.C.	SEE HORIZ SCHED BLW	NONE	OFFSET BLOCK PER ARCH

MASONRY WALL NOTES:
1. COORDINATE WALL FINISHES, MATERIALS, COURSING, ETC. WITH ARCHITECTURAL DRAWINGS.
2. DO NOT SOLID GROUT WALLS UNLESS REQUIRED BY SCHEDULE, NOTES, OR DETAILS.
3. SOLID GROUT ALL MASONRY COURSES BELOW GRADE.
4. VERTICAL REINFORCING SHALL BE CENTER IN WALL (UNO).
5. PROVIDE TWO VERTICAL BARS (MIN) AT ALL CORNERS AND END OF WALLS.
6. HORIZONTAL WALL REINFORCING SHALL BE PLACED BETWEEN VERTICAL MASONRY COLUMN REINFORCING BARS.
7. HORIZONTAL WALL REINFORCING SHALL CONTINUE THROUGH MASONRY LINTELS. WHERE BOTH HORIZONTAL WALL REINFORCING AND LINTEL REINFORCING OCCUR IN THE SAME COURSE, USE THE LARGER REINFORCING.
8. MASONRY WALL NOT DESIGNATED IN THE PLANS SHALL BE REINFORCED AS FOLLOWS:

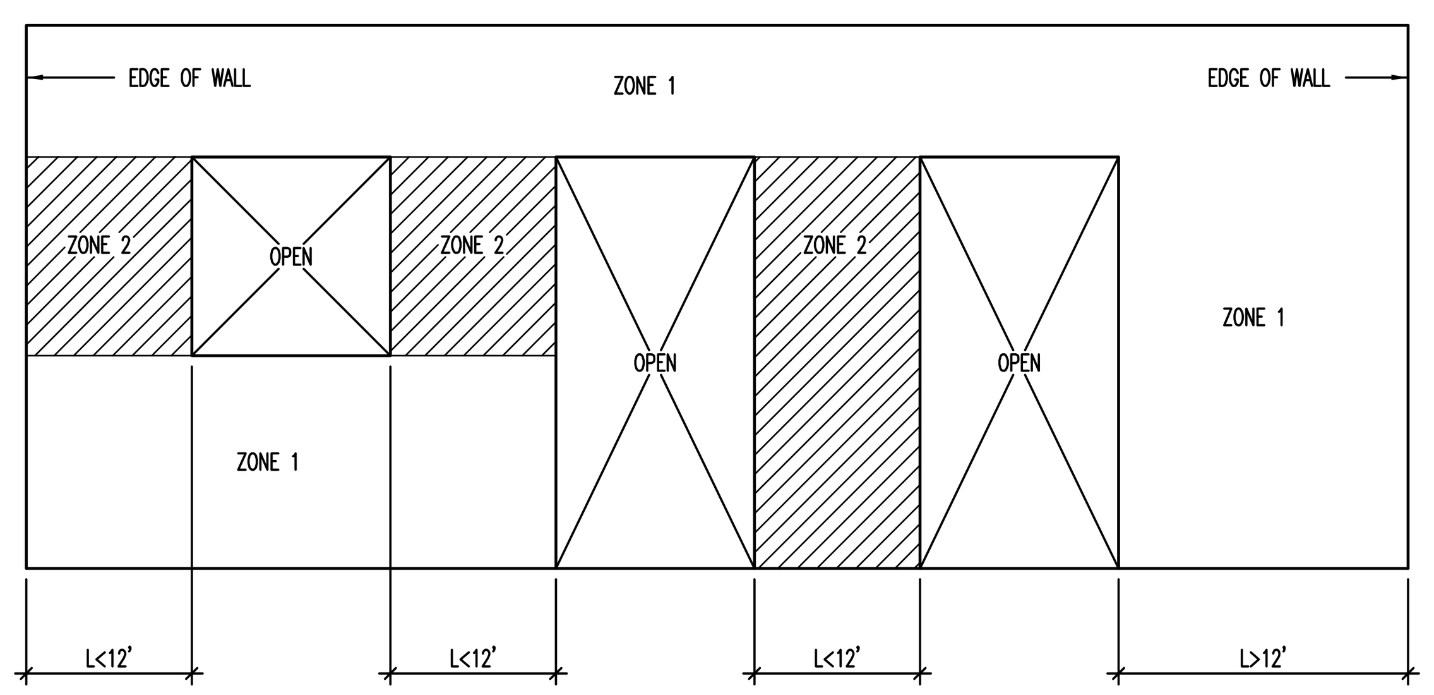
THICKNESS	VERTICAL REINFORCING	HORIZONTAL REINFORCING
8"	#5 BARS AT 32" O.C.	#5 BARS AT 48" O.C.

9. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

HORIZONTAL REINFORCING SCHEDULE

WALL LENGTH (L)	HORIZONTAL REINFORCING	COMMENTS
L ≥ 12'-0"	#5 AT 48" O.C.	ZONE 1
6'-0" ≤ L < 12'-0"	#5 AT 24" O.C.	ZONE 2
4'-0" ≤ L < 6'-0"	#4 AT 16" O.C.	ZONE 2
L < 4'-0"	#4 AT 8" O.C.	USE #5 AT 48" O.C. WHERE MASONRY COLUMN TIES ARE AT 8" O.C.

MASONRY WALL ZONE NOTES:
L INDICATES LENGTH OF WALL PIER
ZONE 1 = WALLS LONGER THAN 12'-0" (L > 12'-0")
ZONE 2 = WALLS SHORTER THAN 12'-0" (L < 12'-0")



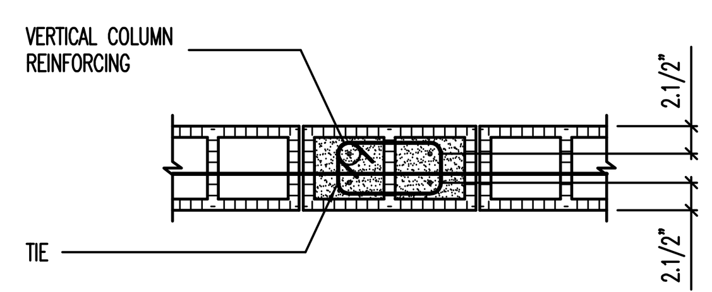
WALL REINFORCING ZONES

1 MASONRY WALL SCHEDULE
SCHED_MAS_WALL-01
NO SCALE

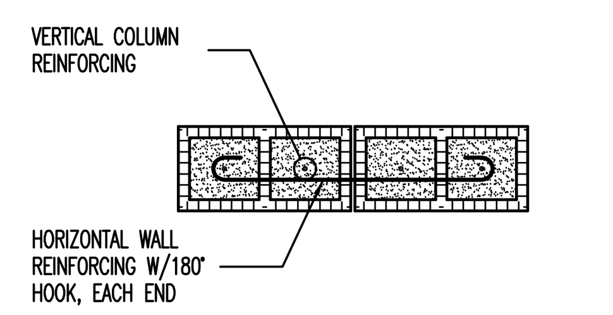
MASONRY COLUMN SCHEDULE

MARK	SIZE	REINFORCING		REINFORCING SCHEMATIC
		VERTICAL	TIES	
MC-16A	WTx16"	(2) #5	NONE	
MC-16B	WTx16"	(4) #5	#2 AT 8" O.C.	
MC-24A	WTx24"	(3) #5	NONE	
MC-24B	WTx24"	(6) #5	#2 AT 8" O.C.	
MC-32A	WTx32"	(4) #5	NONE	
MC-32B	WTx32"	(8) #5	#2 AT 8" O.C.	
MC-48B	WTx48"	(12) #5	#2 AT 8" O.C.	
MC-72A	WTx72"	(9) #5	NONE	

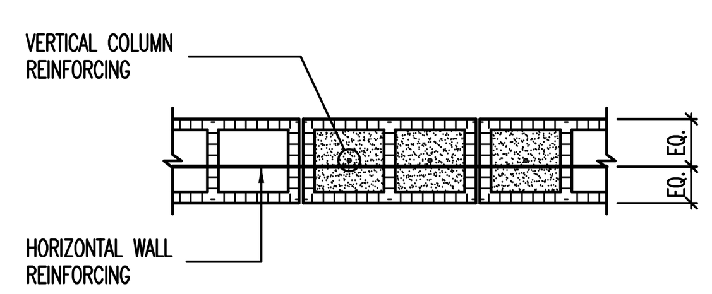
MASONRY COLUMN NOTES:
1. THE CENTERLINE OF THE VERTICAL BARS SHALL BE LOCATED 2.1/2" FROM THE FACE OF THE MASONRY. HORIZONTAL WALL REINFORCING SHALL BE LOCATED TO THE INSIDE OF THE VERTICAL BARS.
2. VERTICAL REINFORCING AND TIES SHALL EXTEND FULL HEIGHT OF WALL (UNO).
3. VERTICAL MASONRY COLUMN REINFORCING SHALL EXTEND INTO THE FOOTING AND TERMINATE WITH A STANDARD 90° HOOK. FOR CONCRETE FOUNDATION WALLS TALLER THAN 5'-0", VERTICAL COLUMN REINFORCING SHALL DOWEL 4'-0" MINIMUM INTO THE FOUNDATION WALL.
4. IN CONCRETE FOUNDATION WALLS, VERTICAL MASONRY COLUMN REINFORCING SHALL BE TIED WITH #3 TIES AT THE SAME SPACING AND CONFIGURATION AS THE MASONRY COLUMN ABOVE.
5. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.



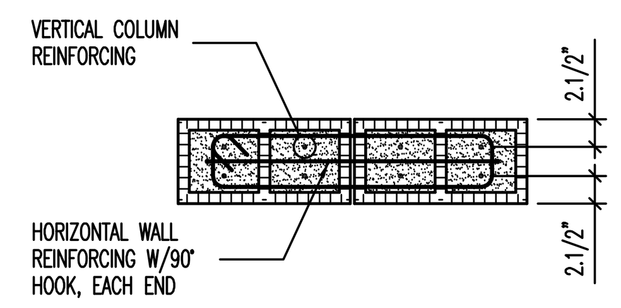
TYPICAL COLUMN CONFIGURATION SCHEMATIC



TYPICAL ISOLATED COLUMN CONFIGURATION SCHEMATIC



TYPICAL COLUMN CONFIGURATION SCHEMATIC



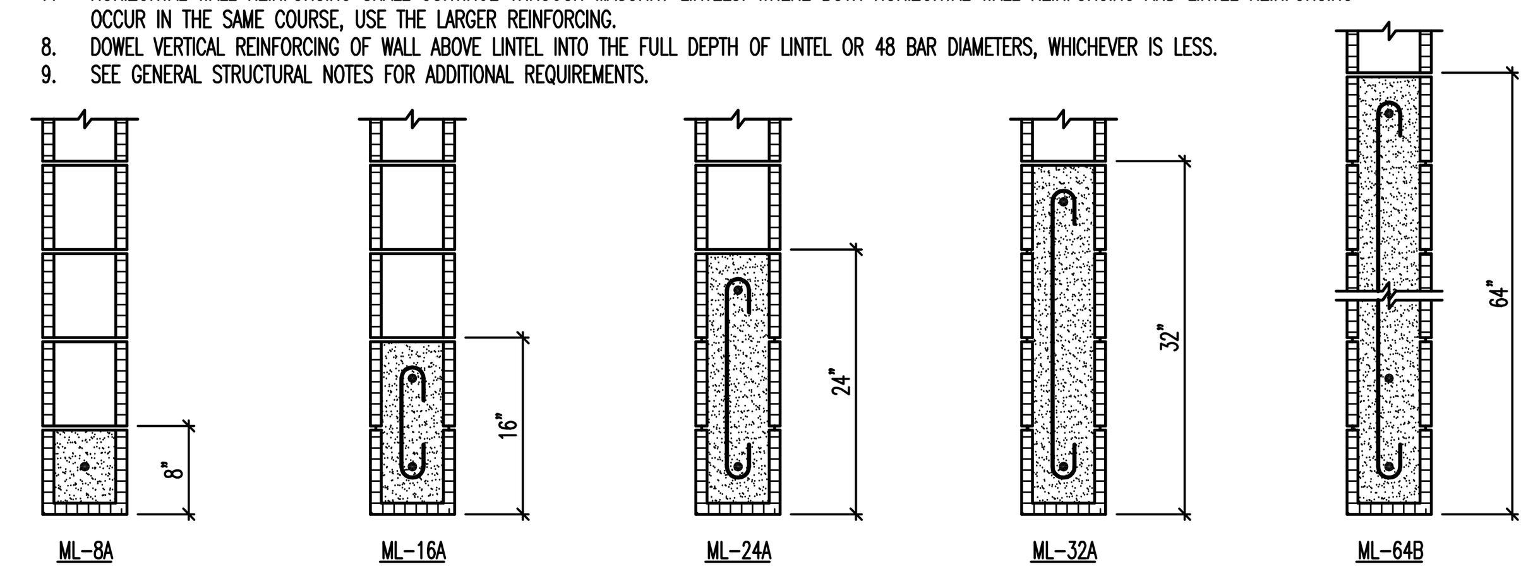
TYPICAL ISOLATED COLUMN CONFIGURATION SCHEMATIC

2 MASONRY COLUMN SCHEDULE
SCHED_MAS_COL-01
NO SCALE

MASONRY LINTEL SCHEDULE

MARK	DEPTH	MAXIMUM SPAN FOR UNSCHEDULED OPENINGS	REINFORCING		COMMENTS
			HORIZONTAL	STIRRUPS	
ML-8A	8"	3'-4"	(1) #7 x CONT	NONE	.
ML-16A	16"	6'-0"	(1) #7 x CONT TOP AND BOTTOM	#4 AT 8" O.C.	
ML-24A	24"	8'-0"	(1) #7 x CONT TOP AND BOTTOM	#4 AT 8" O.C.	
ML-32A	32"	10'-0"	(1) #7 x CONT TOP AND BOTTOM	#4 AT 8" O.C.	
ML-64B	64"	19'-0"	(1) #7 x CONT, TOP (2) #7 x CONT, BOTTOM	#4 AT 8" O.C.	

MASONRY LINTEL NOTES:
1. LINTEL WIDTH AND MATERIAL TYPE SHALL BE THE SAME AS THE WALL IN WHICH THE LINTEL IS CONSTRUCTED.
2. GROUT MASONRY LINTELS MONOLITHICALLY WITH THE SUPPORT WALL OR COLUMN AT EACH END.
3. MASONRY LINTELS ML-8A, ML-16A, ML-24A, AND ML-32A SHALL BE USED OVER OPENINGS IN MASONRY WALLS WHEN A SPECIFIC MASONRY LINTEL IS NOT OTHERWISE SPECIFIED. WHEN A LINTEL IS SPECIFIED ON THE PLANS, THE MAXIMUM SPAN AS NOTED IN THIS SCHEDULE SHALL NOT APPLY. CONSULT THE STRUCTURAL ENGINEER FOR LINTELS NOT SPECIFIED ON THE PLANS WHICH HAVE A SPAN GREATER THAN 10'-0".
4. MASONRY LINTELS ML-8A, ML-16A, ML-24A, AND ML-32A SHALL NOT BE LOCATED DIRECTLY BELOW FLOOR OR ROOF BEAMS OR GIRDERS UNLESS NOTED OTHERWISE ON THE PLANS. JOISTS SHALL NOT BEAR ON ANY LINTEL LESS THAN 16" DEEP. CONSULT THE STRUCTURAL ENGINEER FOR LINTELS NOT SHOWN ON THE PLANS WHICH ARE LOCATED DIRECTLY BELOW FLOOR OR ROOF BEAMS OR GIRDERS.
5. EXTEND ALL HORIZONTAL REINFORCING 48 BAR DIAMETERS MINIMUM BEYOND THE EDGE OF ALL OPENINGS. IF HORIZONTAL REINFORCING CANNOT EXTEND 48 BAR DIAMETERS BEYOND EDGE OF OPENING, PROVIDE 90° STANDARD HOOK.
6. SPLICE TOP BARS AT MIDSPAN OF LINTEL ONLY AND BOTTOM BARS OVER SUPPORTS ONLY.
7. HORIZONTAL WALL REINFORCING SHALL CONTINUE THROUGH MASONRY LINTELS. WHERE BOTH HORIZONTAL WALL REINFORCING AND LINTEL REINFORCING OCCUR IN THE SAME COURSE, USE THE LARGER REINFORCING.
8. DOWEL VERTICAL REINFORCING OF WALL ABOVE LINTEL INTO THE FULL DEPTH OF LINTEL OR 48 BAR DIAMETERS, WHICHEVER IS LESS.
9. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.



3 MASONRY LINTEL SCHEDULE
SCHED_MAS_LNTL-01
NO SCALE

MASONRY REINFORCING LAP SCHEDULE

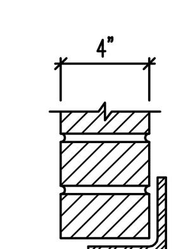
BAR SIZE	(1) BAR PER CELL	(2) BARS PER CELL
#3	18"	18"
#4	24"	24"
#5	34"	34"
#6	37"	68"
#7	52"	92"
#8	79"	161"

2009 IBC

4 MASONRY REINFORCING LAP SCHEDULE (2000psi)
SCHED_MAS_REINF-01
NO SCALE

VENEER LINTEL SCHEDULE

CLEAR OPENING	SIZE OF ANGLE
UP TO 5'-0"	L3.1/2x3x1/4
5'-1" TO 7'-0"	L3.1/2x3.1/2x1/4
7'-1" TO 9'-0"	L5x3.1/2x1/4
9'-1" TO 10'-0"	L5x3.1/2x5/16
10'-1" TO 11'-0"	L5x3.1/2x3/8
11'-1" TO 12'-0"	L6x4x3/8
12'-1" AND OVER	REQUIRES SPECIAL ANALYSIS



NOTE:
LINTELS CARRY VENEER ONLY. WHERE FLOORS, ROOFS, OR CONCENTRATED LOADS OCCUR, FURTHER ANALYSIS IS NECESSARY. PROVIDE 1" OF BEARING AT EACH END FOR EACH FOOT OF SPAN. MINIMUM BEARING OF 6" EACH SIDE OF OPENING. USE THIS SCHEDULE UNLESS NOTED OTHERWISE. STEEL ANGLES SHALL BE GALVANIZED AT EXTERIOR CONDITIONS.

5 VENEER LINTEL SCHEDULE
SCHED_STL_LNTL-01
NO SCALE

CONSTRUCTION DOCUMENTS

"Engineering Results"
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DATE/REVISION 11 · 24 · 10
PROJECT #. 10314

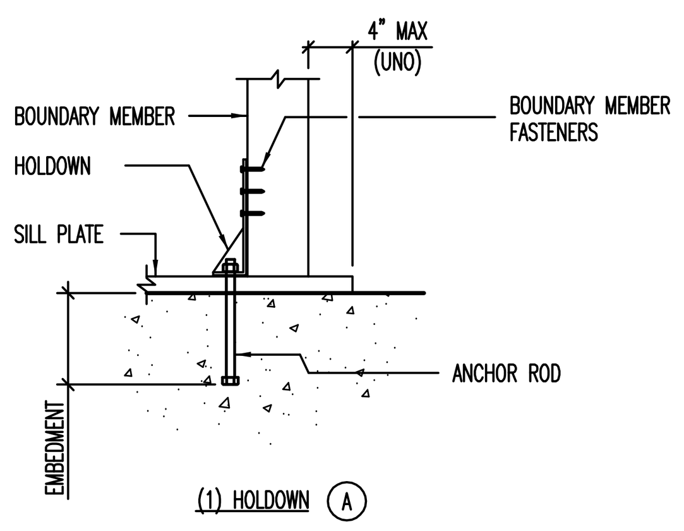
MASONRY SCHEDULES

S602

HOLDOWN SCHEDULE

SIMPSON HOLDOWN	BOUNDARY MEMBER	BOUNDARY MEMBER FASTENERS	ANCHOR ROD	EMBEDMENT	DETAIL	COMMENTS
HDU4	(2) 2x6	10-SDS 1/4"x2.1/2"	5/8"	.	A	.
HDU2	(2) 2x6	6-SDS 1/4"x2.1/2"	5/8"	.	A	
HDU4	(2) 2x6	14-SDS 1/4"x2.1/2"	5/8"	.	A	

HOLDOWN NOTES:
1. ANCHOR RODS SHALL BE HEADED BOLTS OR RODS THREADED WITH HEAVY HEX NUT (UNO).
2. INCREASE FOOTING DEPTH WHERE EMBEDMENT LENGTH PLUS 3" IS GREATER THAN FOOTING DEPTH SPECIFIED.
3. ALL HOLDOWNS SPECIFIED ARE "SIMPSON – STRONG TIE", SEE GENERAL STRUCTURAL NOTES FOR SUBSTITUTIONS.
4. LAG SCREWS SHALL NOT BE USED IN PLACE OF BOLTS.
5. DO NOT OVER TORQUE NUTS; SEE MANUFACTURER'S TORQUE REQUIREMENTS.
6. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.



(1) HOLDOWN (A)

1 HOLDOWN SCHEDULE

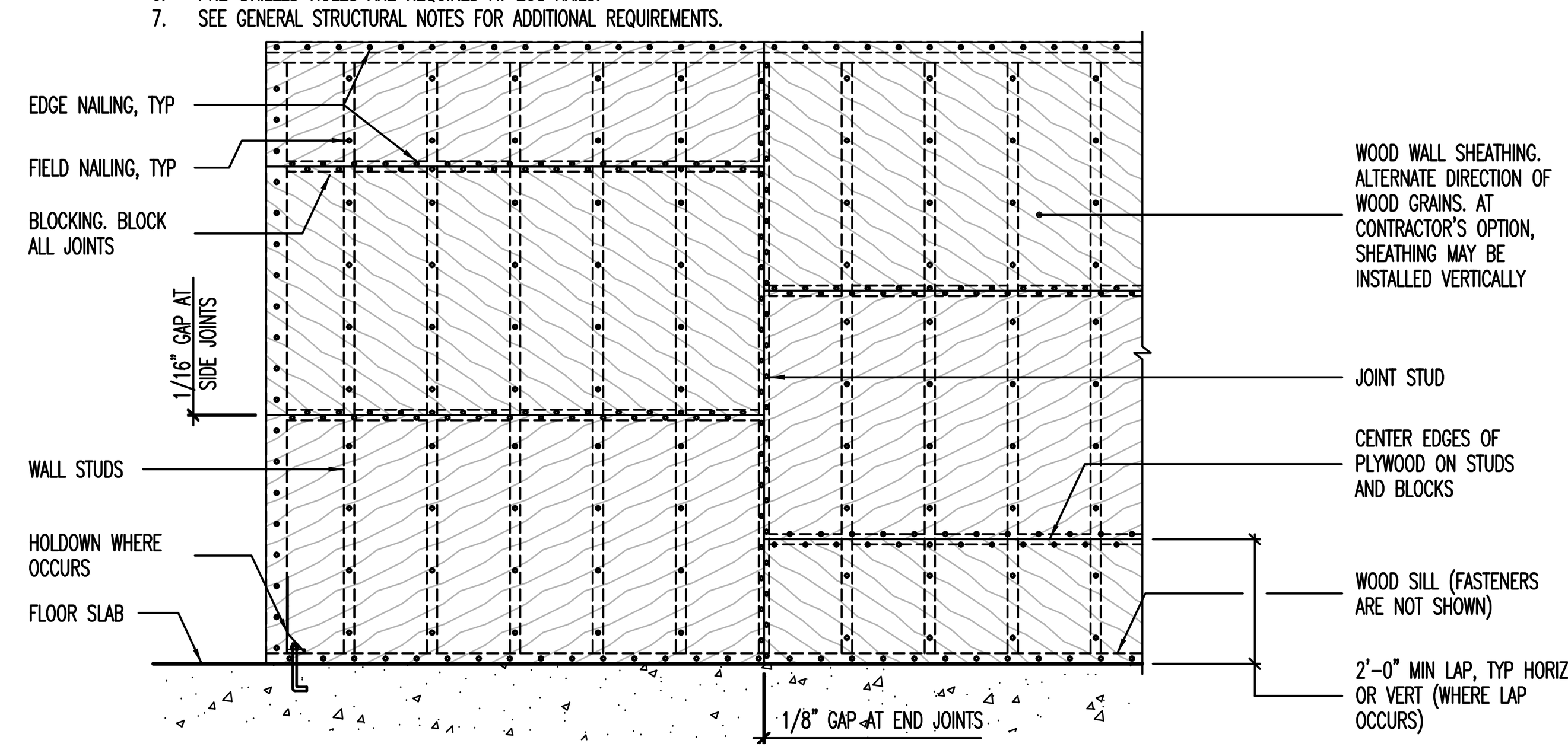
SCHED_WOOD_HDWN-01

NO SCALE

WOOD SHEATHING SHEARWALL SCHEDULE

MARK	WALL FRAMING					WALL SHEATHING				COMMENTS
	STUDS	TOP PLATE	BOTTOM PLATE	BOTTOM PLATE FASTENERS	STUD & BLOCK AT JOINTS	THICKNESS	NAIL SIZE	EDGE NAIL	FIELD NAIL	
SW-6A	2x6 AT 16" O.C.	(2) 2x6	2x6	5/8"ø A.B. AT 48" O.C.	2x	7/16"	8d	6" O.C.	12" O.C.	
SW-6B	2x6 AT 16" O.C.	(2) 2x6	2x6	5/8"ø A.B. AT 32" O.C.	2x	7/16"	8d	4" O.C.	12" O.C.	
SW-6C	2x6 AT 16" O.C.	(2) 2x6	2x6	5/8"ø A.B. AT 48" O.C.	–	–	–	–	–	

WOOD SHEATHING SHEARWALL NOTES:
1. PROVIDE 1/4"x3"x0'-3" WASHER PLATES AT BOLTS. CONTRACTOR HAS OPTION TO PROVIDE A DIAGONAL SLOTTED HOLE WITH A WIDTH OF UP TO 3/16" LARGER THAN THE BOLT DIAMETER AND A SLOT LENGTH OF UP TO 1.3/4", PROVIDED A STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND THE NUT.
2. USE COMMON NAILS. AT SILL PLATE USE HOT-DIPPED OR TUMBLED GALVANIZED NAILS.
3. ANCHOR BOLTS SHALL HAVE A 7" MINIMUM EMBEDMENT INTO CONCRETE AND TERMINATE WITH A STANDARD 90° HOOK OF 3-TIMES THE ANCHOR BOLT DIAMETER AND BE HOT-DIPPED GALVANIZED OR STAINLESS STEEL IN ACCORDANCE WITH IBC 2304.9.5.
4. WHERE STUDS ARE CUT FOR PLACEMENT OF ANCHOR BOLTS OR OTHER ELEMENTS, AN ADJACENT STUD SHALL BE ADDED.
5. WHERE WOOD SHEATHING IS APPLIED TO BOTH SIDES OF A WALL AND NAIL SPACING IS LESS THAN 6" O.C. ON EITHER SIDE, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS, OR FRAMING MEMBER SHALL BE 3" OR THICKER AND NAILS ON EITHER SIDE SHALL BE STAGGERED.
6. PRE-DRILLED HOLES ARE REQUIRED AT 20d NAILS.
7. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.



2 WOOD SHEATHING SHEARWALL SCHEDULE [ELEVATION VIEW]

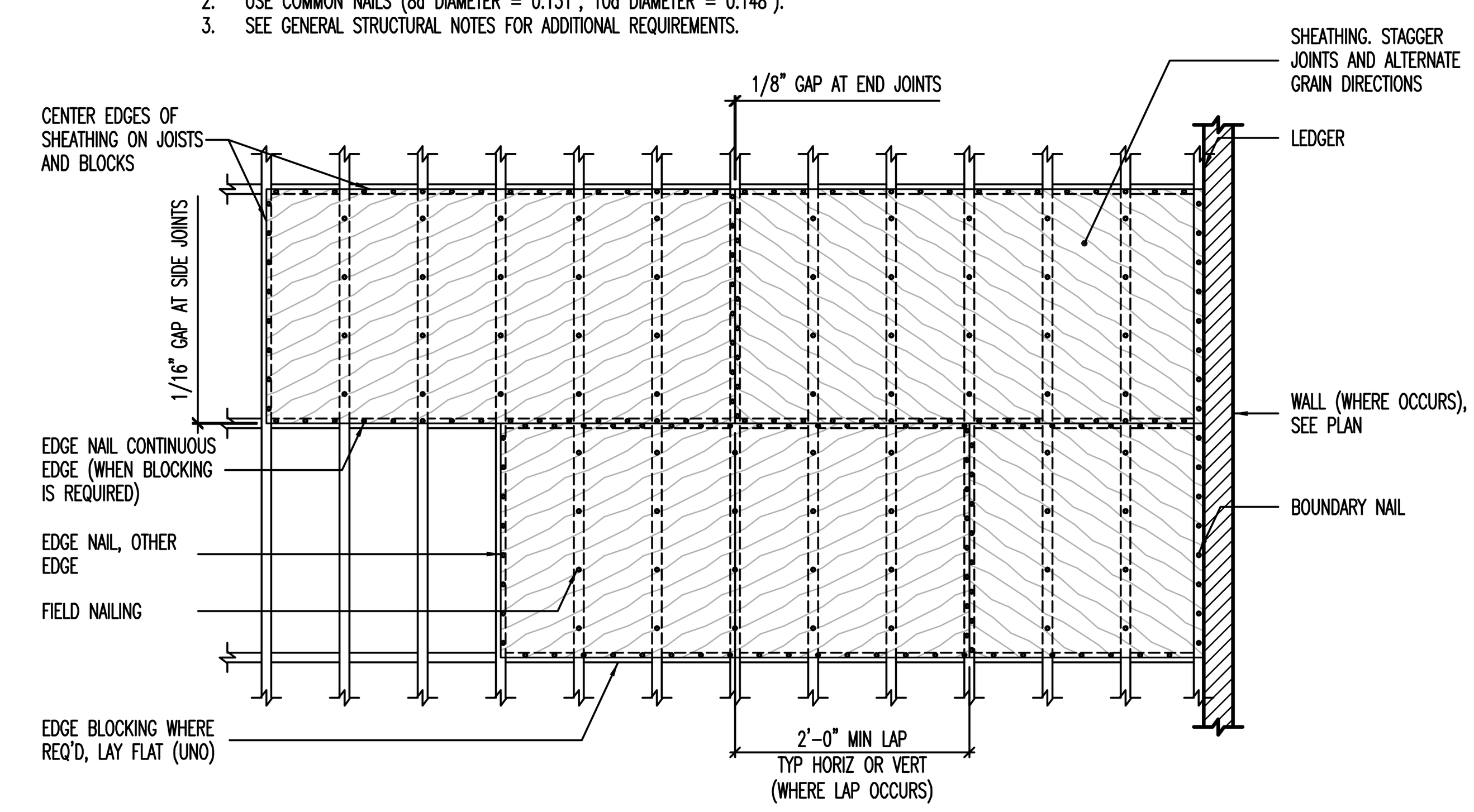
SCHED_WOOD_WALL-01

NO SCALE

SHEATHING SCHEDULE AT ROOF AND FLOOR

LOCATION	WOOD SHEATHING THICKNESS	NAIL SIZE	EDGE NAIL		FIELD NAIL	BOUNDARY NAIL	EDGE BLOCK	COMMENTS
			CONT EDGE	OTHER EDGE				
ROOF	19/32"	10d	6	6	12	6	SEE PLAN	.

SHEATHING NOTES:
1. MINIMUM NAIL PENETRATION INTO FRAMING: 8d-1.1/2", 10d-1.5/8".
2. USE COMMON NAILS (8d DIAMETER = 0.131", 10d DIAMETER = 0.148").
3. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.



4 SHEATHING SCHEDULE AT ROOF AND FLOOR [PLAN VIEW]

SCHED_WOOD_SHEATH-01

NO SCALE

HANGER SCHEDULE

JOIST / BEAM	HANGER TYPE	FASTENERS			COMMENTS
		TOP	FACE	JOIST	
11.7/8" BCI	ITS	(4) #10	(2) 10d	.	.
11.7/8" LVL	BA	(6) #16	(10) 16d	(2) 10dx1.1/2"	
(3) 2x10	HU210	–	(14) 16d	(6) 16d	
(3) 2x12	HU212	–	(6) 16d	(6) 16d	
18" BCI	MIT	(4) 16d	(4) 16d	(2) 10dx1.1/2"	

HANGER NOTES:
1. ALL HANGERS SHALL BE "SIMPSON: STRONG-TIE CONNECTORS" OR APPROVED EQUAL.
2. SEE ARCHITECTURAL DRAWINGS FOR CUSTOM HANGERS AND HANGERS FINISHES.
3. ALL HANGERS SHALL BE AS SCHEDULED HERE, UNLESS NOTED OTHERWISE ON ARCHITECTURAL OR STRUCTURAL DRAWINGS.
4. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

3 HANGER SCHEDULE

SCHED_WOOD_HNGR-01

NO SCALE

MINIMUM NAILING SCHEDULE

CONNECTION	NAILING
SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL	16d AT 16" O.C.
BRIDGING TO JOIST, TOENAIL EACH END	(2) 8d
BLOCKING BETWEEN JOIST OR RAFTERS TO TOP PLATE, TOE NAIL	(3) 8d
RIM JOIST TO TOP PLATE, TOE NAIL	8d AT 6" O.C.
COLLAR TIE TO RAFTER, FACE NAIL	(3) 10d
JACK RAFTER TO HIP, TOE NAIL	(3) 10d
FACE NAIL	(2) 16d
ROOF RAFTER TO 2x RIDGE BEAM, TOE NAIL	(2) 16d
FACE NAIL	(2) 16d
JOIST TO BAND JOIST, FACE NAIL	(3) 16d
LEDGER STRIP, FACE NAIL	(3) 16d
TOP PLATE TO STUD, END NAIL	(2) 16d
DOUBLE STUDS, FACE NAIL	16d AT 24" O.C.
DOUBLED TOP PLATES, FACE NAIL	16d AT 16" O.C.
TOP PLATES, LAPS & INTERSECTION, FACE NAIL	(2) 16d
CONTINUOUS HEADER, TWO PIECES	16d AT 16" O.C. ALONG EACH EDGE
CEILING JOISTS TO PLATE, TOENAIL	(3) 8d
CONTINUOUS HEADER TO STUD, TOENAIL	(4) 8d
CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	(3) 16d
CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	(3) 16d
RAFTER TO PLATE, TOENAIL	(3) 8d
1" BRACE TO EACH STUD & PLATE, FACE NAIL	(2) 8d
BUILT-UP CORNER STUDS	16d AT 24" O.C.
BUILT-UP GIRDER & BEAMS	20d AT 32" O.C. AT TOP, BOTTOM, AND STAGGERED. (2) 20d AT ENDS AND AT EACH SPLICE.
PLYWOOD & PARTICLEBOARD:	
SUBFLOOR, ROOF & WALL SHEATHING (TO FRAMING)*	
1/2" AND LESS	8d
19/32" – 3/4"	8d OR 10d
7/8" – 1"	8d
1.1/8" – 1.1/4"	8d OR 10d
COMBINATION SUBFLOOR-UNDERLAYMENT (TO FRAMING)*	
3/4" AND LESS	6d
7/8" – 1"	8d
1.1/8" – 1.1/4"	8d OR 10d

* NAILS SPACED AT 6" O.C. AT EDGES, 12" O.C. AT INTERMEDIATE SUPPORTS (EXCEPT WHERE SPANS ARE 48" OR MORE, THEN SPACE AT 6" O.C. AT SUPPORTS). FOR NAILING OF DIAPHRAGMS AND SHEAR WALLS, REFER TO SHEARWALL SCHEDULE.

MINIMUM NAILING NOTES:
1. NAILING SCHEDULE IS PER TABLE 2304.9.1 OF THE I.B.C. 2006.
2. NAILING REQUIREMENTS SHOWN HERE DO NOT REPLACE HARDWARE SHOWN ON THE PLANS OR DETAILS.
3. ALL NAILS USED ARE COMMON NAILS.
4. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

5 MINIMUM NAILING SCHEDULE

SCHED_WOOD_NAIL-01

NO SCALE

CONSTRUCTION DOCUMENTS

"Engineering Results"
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DATE/REVISION 11 · 24 · 10

PROJECT #. 10314

WOOD SCHEDULES

S603

LEGEND OF MECHANICAL SYMBOLS AND ABBREVIATIONS

MECHANICAL

Symbol	Description
	POSITIVE PRESSURE DUCT - RISE
	POSITIVE PRESSURE DUCT - DROP
	NEGATIVE PRESSURE DUCT - RISE
	NEGATIVE PRESSURE DUCT - DROP
	ROUND DUCT - RISE
	ROUND DUCT - DROP
	UNDER FLOOR DUCT
	TURNING VANES
	FRESH AIR LOUVER
	RELIEF AIR OR EXHAUST AIR LOUVER
12X12 / 200	CEILING SUPPLY DIFFUSER
22X22 / 200	CEILING RETURN REGISTER
12X12 / 200	CEILING EXHAUST REGISTER, (BALANCE TO MATCH SUPPLY IF RETURN CFM IS NOT SHOWN)
24X10 / 200	SIDEWALL SUPPLY REGISTER
24X10 / 200	SIDEWALL EXHAUST OR RETURN REGISTER
12X12 / 200	CEILING SUPPLY DIFFUSER WITH FLEXIBLE DUCT
12X12 / 200	CEILING AIR GRILLE WITH FLEXIBLE DUCT
	CEILING RETURN AIR GRILE W/ SOUND BOOT
3-1" SLOTS / @ 48" 400	LINEAR DIFFUSER WITH PLENUM AND FLEXIBLE DUCT CONNECTION. NO. OF SLOTS & SIZE OF SLOT ON TOP, ACTIVE LENGTH AND CFM ON BOTTOM
	FLEXIBLE DUCT CONNECTION
	FLEXIBLE DUCT
	FAN
12/8 FO	FLAT OVAL DUCT WITH NET INSIDE DIMENSIONS SHOWN IN INCHES.
12/8	RECTANGULAR DUCT WITH NET INSIDE DIMENSIONS SHOWN IN INCHES.
12Ø	ROUND DUCT WITH NET INSIDE DIMENSIONS SHOWN IN INCHES.
UP	INCLINED RISE
DN	INCLINED DROP
W R	R/W=1. ROUND DUCT SIMILAR TO RECTANGULAR
12/12 8/8	RECTANGULAR TO RECTANGULAR OR ROUND TO ROUND DUCT TRANSFORMATION MAXIMUM 15° INCLUDED ANGLE EXCEPT WHERE SHOWN OTHERWISE.
12/12 12Ø	RECTANGULAR TO ROUND DUCT TRANSFORMATION
R 6	BRANCH DUCT SPLIT WITH 6" WIDTH AND MIN. R=WIDTH OF BRANCH DUCT DOWNSTREAM. ELBOW TURNING VANE OPTIONAL.
1.5D 1.25D 45° D D	TAP ENTRY AREA EQUALS 150% OF BRANCH AREA
12Ø 12/12	HIGH EFFICIENCY FITTING
	MANUAL VOLUME DAMPER
FD	FIRE DAMPER IN DUCT, W/ ACCESS PANEL REQD.
FSD	COMBINATION FIRE/SMOKE DAMPER W/ ACCESS PANEL
SD	SMOKE DAMPER W/ ACCESS PANEL
BDD	BACK DRAFT DAMPER
ATC OR	ATC DAMPER
AD	ACCESS PANEL IN DUCT OR PLENUM
	HEATING OR COOLING COIL IN DUCT
	SINGLE DUCT AIR TERMINAL BOX VARIABLE OR CONSTANT VOLUME. MIN. 1-1/2 TERMINAL INLET SIZE STRAIGHT DUCT AT TERMINAL INLET.
	4-WAY BLOW PATTERN
	3-WAY BLOW PATTERN
	2-WAY BLOW PATTERN
	2-WAY BLOW PATTERN
	1-WAY BLOW PATTERN
SD	DUCT SMOKE DETECTOR
	UNIT HEATER

TOP FIGURES INDICATE NECK SIZE. BOTTOM FIGURE INDICATES CFM.

WITH RESPECT TO AIR FLOW 15° NOMINAL INCLINE WITH RADIUS TURNS=DEPTH OF DUCT.

PLUMBING

Symbol	Description
	FLOOR SINK
	FLOOR DRAIN
FCO / COTG	FLOOR CLEAN-OUT OR CLEAN-OUT TO GRADE
	ROOF DRAIN
	DOWNSPOUT NOZZLE
	ARROW INDICATES DIRECTION OF FLOW IN PIPE
	CHECK VALVE
	PRESSURE REDUCING, EXTERNAL PRESSURE VALVE
	PRESSURE REDUCING, SELF CONTAINED VALVE
	ATC VALVE - 2 WAY
	ATC VALVE - 3 WAY
S	SOLENOID VALVE
	GATE VALVE
	GATE VALVE - NON RISING STEM
	GLOBE VALVE
	TEMPERATURE AND PRESSURE TEST PORT
PS	PRESSURE SWITCH
	GAS COCK
0.0 GPM	CALIBRATED BALANCING VALVE WITH GPM INDICATED
RPBP	REDUCED PRESSURE BACKFLOW PREVENTOR W/ DRAIN PAN
	BRANCH - BOTTOM CONNECTION
	BRANCH - TOP CONNECTION
	BRANCH - SIDE CONNECTION
	RISE OR DROP
	RISER - DOWN (ELBOW)
	RISER - DOWN (ELBOW)
VTR	VENT THRU ROOF
	WATER HAMMER ARRESTOR
	INLINE PUMP
	INLINE PUMP
	CLEAN-OUT
	RELIEF VALVE
	ANGLE VALVE
	FLOW METER
	UNION
	BALANCING COCK
	SHUT-OFF COCK FOR USE WITH PRESSURE GAUGE
	FLEXIBLE EXPANSION JOINT
0-100°F	THERMOMETER - TEMP RANGE AS INDICATED
	PRESSURE GAUGE WITH SHUT-OFF COCK
	PRESSURE GAUGE WITH PIGTAIL
	LATERAL STRAINER WITH BLOW-OFF VALVE, PROVIDE HOSE END WITH CAP WHERE DISCHARGE IS NOT PIPED TO DRAIN
	BALL VALVE (PIPE SIZES 2" AND SMALLER) BUTTERFLY VALVE (PIPE SIZES 2-1/2" AND LARGER)
	MOTOR OPERATED BUTTERFLY VALVE
	VALVE IN RISE
	AIR VENT-MANUAL
A	AIR VENT-AUTO
	FLOW SWITCH
	REDUCER
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER

PLUMBING CONT.

Symbol	Description
	THERMOSTATIC MIXING VALVE
	HOSE BIBB
	PIPE CAP
S	SWITCH
S	SENSOR
T	THERMOSTAT
T N	NIGHT THERMOSTAT
	FILL PORT
	DRAIN PAN AND P-TRAP
(NAME)	FIXTURE FROM LEVEL ABOVE
GPM LB/HR.	FLOW METER ORIFICE
	FLANGE
	90° ELBOW
	STEAM TRAP, F&T=FLOAT & THERMOSTATIC 45° ELBOW
F&T	B=BUCKET, T=THERMOSTATIC
DN	LEADER INDICATES DOWNWARD SLOPE
	DEMOLITION
	ALIGNMENT GUIDE
	ANCHOR
	LUBRICATED PLUG COCK

SYMBOLS

Symbol	Description
P-1	PLUMBING FIXTURES
	POINT OF CONNECTION
A / M-101	SECTION TAG - TOP FIGURE IS SECTION NO. BOTTOM FIGURE IS SHEET NO.
A / M101	DETAIL TAG - TOP FIGURE IS DETAIL NO. BOTTOM FIGURE IS SHEET NO.
EF / 1	EQUIPMENT IDENTIFICATION
1	KEYED NOTE IDENTIFICATION

FIRE

Symbol	Description
	HOSE VALVE
	NRS GATE VALVE WITH SUPERVISION
	FLOW SWITCH
	FIRE RISER
	SPRINKLER HEAD
F	FIRE SPRINKLER WATER

LINETYPES

Symbol	Description
AV	ACID VENT
AW	ACID WASTE
BBD	BOILER BLOW DOWN
BF	BOILER FEED WATER
B	BRINE
C02	CARBON DIOXIDE
CA	COMPRESSED AIR
CF	CHEMICAL FEED
CHWS	CHILLED WATER SUPPLY
CHWR	CHILLED WATER RETURN
CS	CONDENSER WATER SUPPLY
CR	CONDENSER WATER RETURN
	DOMESTIC COLD WATER (DCW)
	DOMESTIC HOT WATER (DHW)
	DOMESTIC HOT WATER RETURN (DHWR)
DI	DEIONIZED WATER SUPPLY
DIR	DEIONIZED WATER RETURN
E(NAME)	EXISTING PIPING
(NAME)	EXISTING PIPING TO BE REMOVED
GHR	GLYCOL HEAT RECOVERY PIPING
G(NAME)	GLYCOL PIPING SOLUTION
FOR	FUEL OIL RETURN
FOS	FUEL OIL SUPPLY
FOV	FUEL OIL VENT
G	NATURAL GAS
HG	HOT GAS
HFR	HELICOPTER FUEL RETURN
HFS	HELICOPTER FUEL SUPPLY
HP(NAME)	HIGH PRESSURE DOMESTIC WATER
HPC	HIGH PRESSURE CONDENSATE
HPS	HIGH PRESSURE STEAM
HWR	HEATING HOT WATER RETURN
HWS	HEATING HOT WATER SUPPLY
IA	INSTRUMENT AIR
IA 120	INSTRUMENT AIR AT PRESSURE INDICATED
LA	LAB AIR
LV	LAB VACUUM
LPC	LOW PRESSURE CONDENSATE
LPG	LIQUIFIED PETROLEUM GAS
LPS	LOW PRESSURE STEAM
MA	MEDICAL AIR
MA 120	MEDICAL AIR AT PRESSURE INDICATED
MPC	MEDIUM PRESSURE CONDENSATE
MPS	MEDIUM PRESSURE STEAM
MUW	MAKE UP WATER
MV	MEDICAL VACUUM
N	NITROGEN
N20	NITROUS OXIDE
OX	MEDICAL OXYGEN
OX 120	MEDICAL OXYGEN AT PRESSURE INDICATED
	PUMPED CONDENSATE

LINETYPES CONT.

Symbol	Description
RO	REVERSE OSMOSIS WATER SUPPLY
ROR	REVERSE OSMOSIS WATER RETURN
RD	ROOF DRAIN
RDO	ROOF DRAIN OVERFLOW
RL	REFRIGERANT LIQUID
RS	REFRIGERANT SUCTION
	SEWER (BELOW GRADE)
	SEWER (ABOVE GRADE)
SW	SOFT DOMESTIC WATER (SW)
V	VACUUM
	VENT (SEWER)

CONSTRUCTION DOCUMENTS

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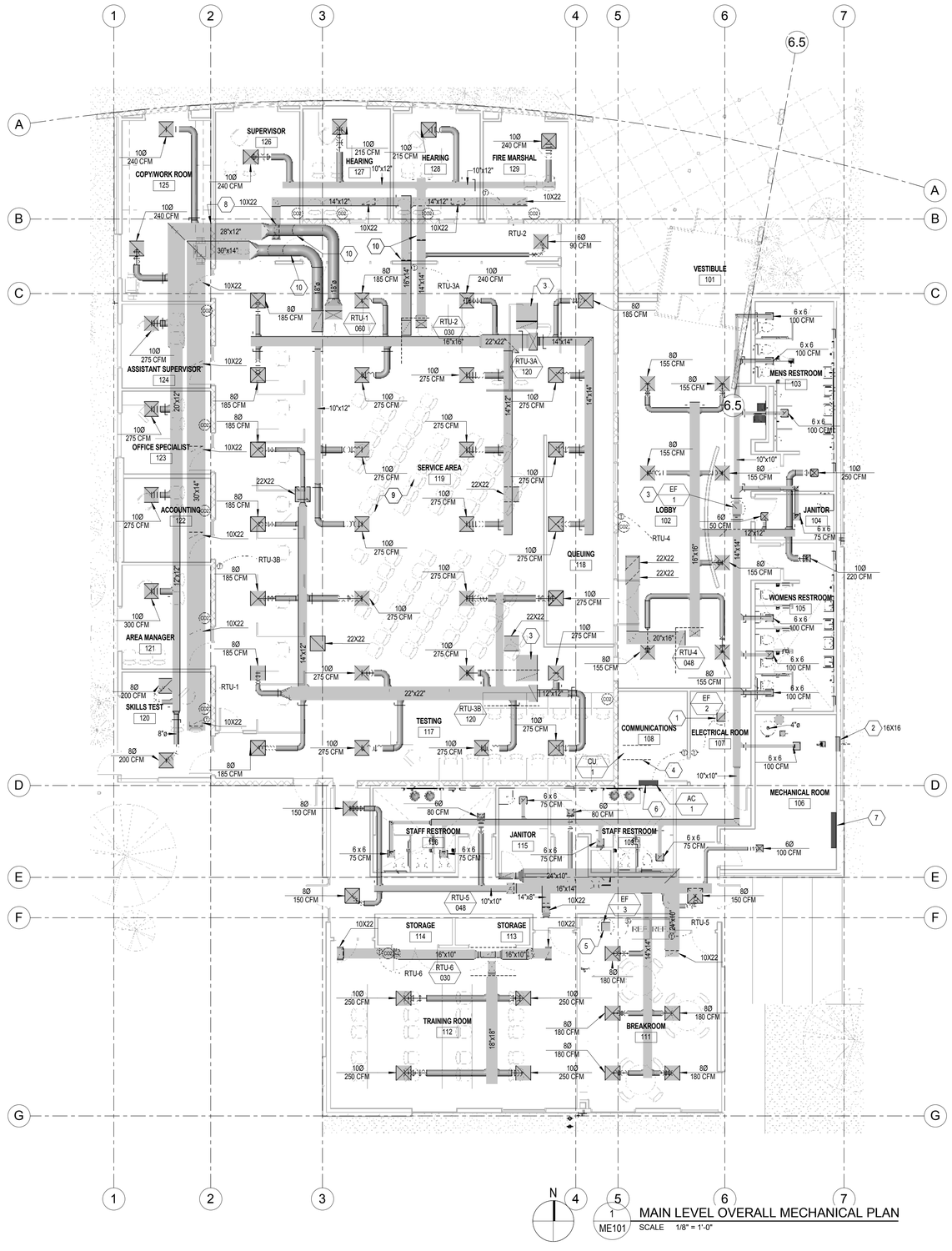
LEGEND OF MECHANICAL SYMBOLS AND ABBREVIATIONS

ME000



N

1 ME101 MAIN LEVEL OVERALL MECHANICAL PLAN

SCALE 1/8" = 1'-0"

KEYED NOTES

1. CONTROL EF-2 WITH THERMOSTAT.
2. COMBUSTION AIR LOUVER.
3. SOUNDBOOT PER DETAIL.
4. CONDENSING UNIT MOUNTED ON ROOF. ROUTE REFRIGERANT LINE SET TO AC-1 IN I.T. ROOM.
5. CONTROL EF-3 WITH WALL SWITCH.
6. ROUTE CONDENSATE TO LAV. TAIL PIECE.
7. ATC PANEL. COORDINATE LOCATION WITH OWNER.
8. DUCT TO PENETRATE CMU WALL IN THIS LOCATION. COORDINATE WITH STRUCTURE/CMU COURSE.
9. ROUTE DUCT THRU WEBBING OF TRUSSES IN THIS AREA. COORDINATE EXACT LOCATIONS.
10. DROP DUCT TO 11'-6" AFF.

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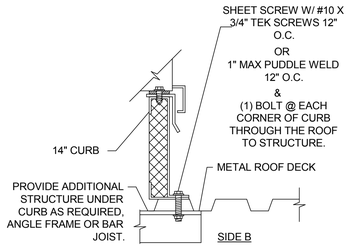
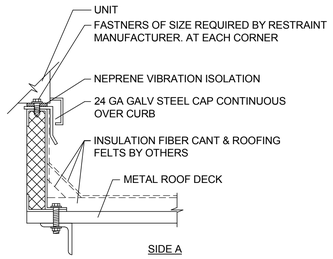
MAIN LEVEL OVERALL MECHANICAL PLAN

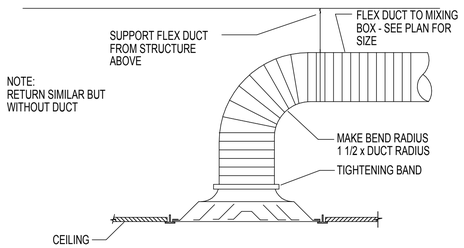
ME101





12 ME501 ROOF CURB INTALLED ON METAL ROOF DECK DETAIL

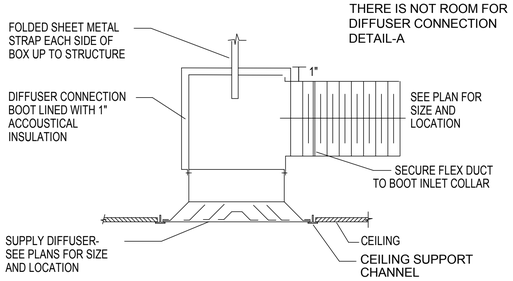
NO SCALE



13 ME501 DIFFUSER CONNECTION DETAIL-A

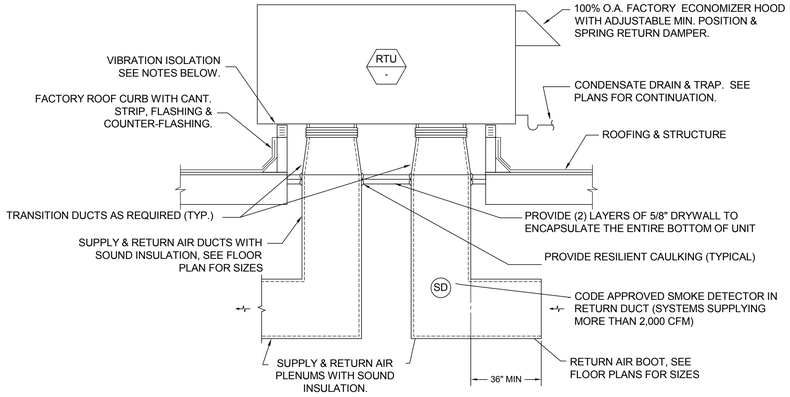
NO SCALE

NOTE:
FOR LOCATION WHERE THERE IS NOT ROOM FOR DIFFUSER CONNECTION DETAIL-A



14 ME501 SUPPLY DIFFUSER W/ FLEX DUCT DETAIL-B

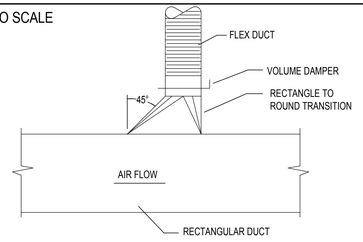
NO SCALE



NOTES:
1. COORDINATE EXACT LOCATION AND FRAMING OF ROOF OPENING WITH GENERAL CONTRACTOR.
2. VIBRATION ISOLATION- SHALL BE FACTORY FURNISHED NEOPRENE GASKET.

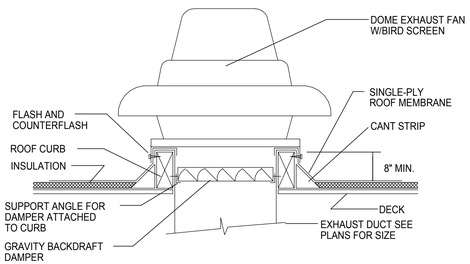
8 ME501 ROOFTOP UNIT MOUNTING DETAIL

NO SCALE



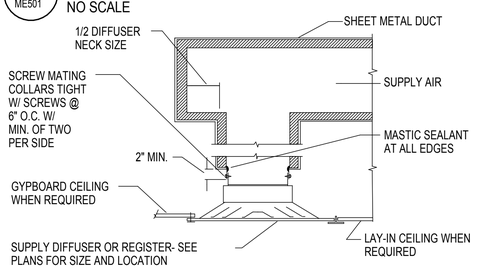
9 ME501 HIGH EFFICIENCY TAKE-OFF DETAIL

NO SCALE



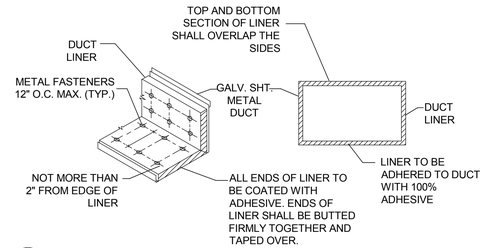
10 ME501 EXHAUST FAN DETAIL

NO SCALE



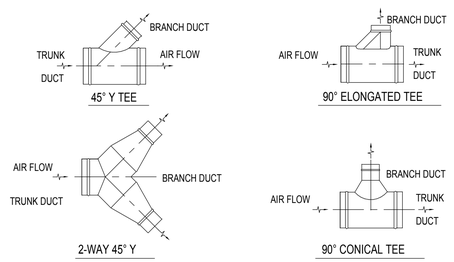
11 ME501 TYPICAL CEILING DIFFUSER DETAIL

NO SCALE



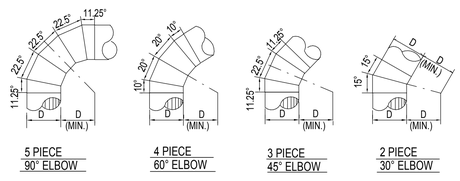
5 ME501 DUCT LINER DETAIL

NO SCALE



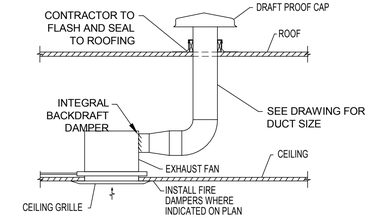
6 ME501 ROUND DUCT BRANCH TAKE-OFF DETAILS

NO SCALE



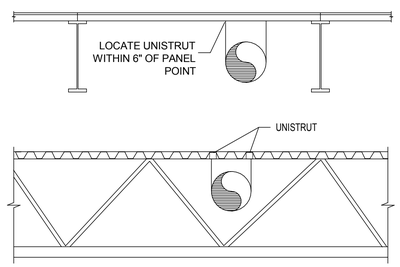
7 ME501 ROUND DUCT ELBOW DETAILS

NO SCALE



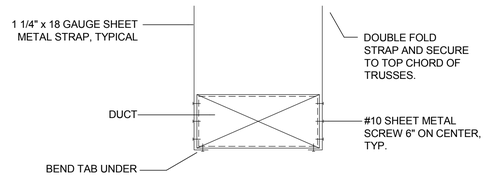
1 ME501 CEILING EXHAUST FAN DETAIL

NO SCALE



2 ME501 SUPPORT DETAIL

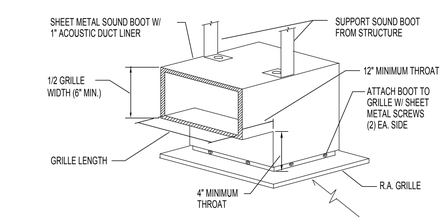
NO SCALE



NOTE:
USE SPECIFIED SPACING AND NOT LESS THAN ONE SUPPORT PER BRANCH.

3 ME501 RECTANGULAR DUCT SUPPORT DETAIL

NO SCALE



4 ME501 TRANSFER GRILLE WITH SOUND BOOT DETAIL

NO SCALE

CONSTRUCTION DOCUMENTS

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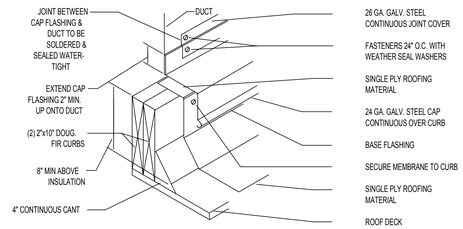
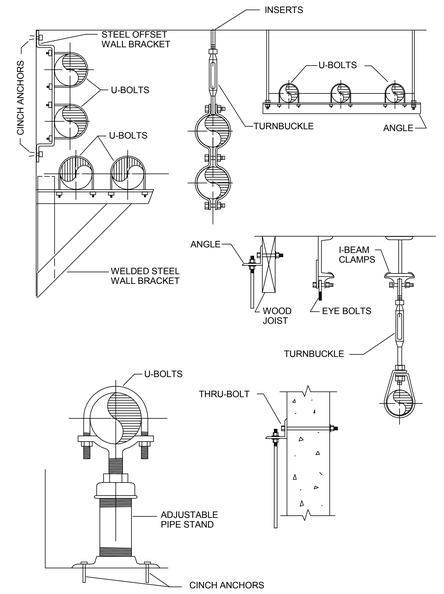
MECHANICAL DETAILS

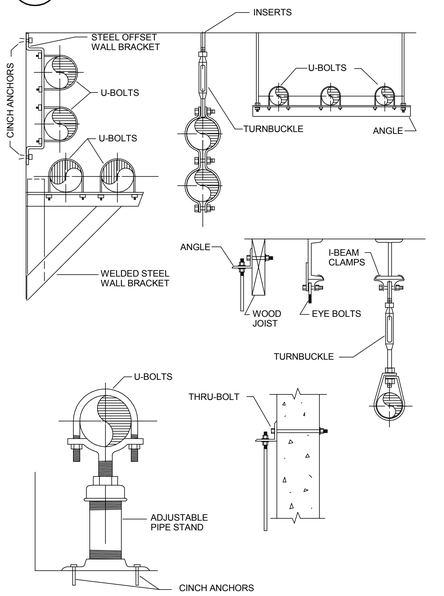
ME501



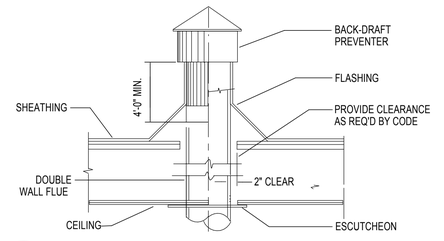
4 ME502 ROOF CURB DETAIL
NO SCALE



1 ME502 TYPICAL PIPE SUPPORT DETAIL
NO SCALE



2 ME502 TYPICAL PIPE SUPPORT DETAIL
NO SCALE



3 ME502 FLUE THRU ROOF DETAIL
NO SCALE

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MECHANICAL DETAILS

ME502

PACKAGED ROOFTOP UNIT SCHEDULE

				SUPPLY FAN				HEATING SECTION			COOLING SECTION					ELECTRICAL				
ID	MANUFACTURER AND MODEL NUMBER	NOMINAL TONS	REFRIGERANT	AIRFLOW RATE (CFM)	EXTERNAL STATIC PRESSURE (IN. WATER)	OUTSIDE AIR CFM	WEIGHT LB	HEATING LOAD (BTU/H)	ENTERING MIXED AIR TEMP. (°F)	LEAVING MIXED AIR TEMP. (°F)	TOTAL COOLING CAPACITY (BTU/H)	ENTERING AIR TEMP. DB/WB (°F)	LEAVING AIR TEMP. DB/WB (°F)	EER	SEER	TOTAL MCA	MOCP	SUPPLY FAN MOTOR (BHP)	SINGLE POINT VOLT/PH/HZ	NOTES
RTU-1	CARRIER 48PG-05	5	R-410A	2000	0.6	140.0	1100.0	72,000	65	92	63,500	78/62	52/50	12.0	-	34.3	50	0.99	208/3	2,3
RTU-2	CARRIER 48PG-04	2.5	R-410A	1000	0.6	140.0	850.0	72,000	60	112	31,600	79/62	52/50	-	15.0	18.9	25	0.35	208/3	2,3
RTU-3A	CARRIER 48PGDC-12	10	R-410A	3400	0.6	800.0	2200.0	181,000	67	105	109,000	77/55	47/42	12.0		61.2	70	1.16	208/3	1,2,3
RTU-3B	CARRIER 48PGDC-12	10	R-410A	3400	0.6	800.0	2200.0	181,000	67	105	109,000	77/55	47/42	12.0		61.2	70	1.16	208/3	1,2,3
RTU-4	CARRIER 48PG-06	4	R-410A	1600	0.6	600.0	950.0	115,000	47	98	46,500	83/62	51/51	-	15.6	23.4	30	0.76	208/3	2,3
RTU-5	CARRIER 48PG-06	4	R-410A	1600	0.6	400.0	950.0	115,000	52	100	44,500	81/62	51/51	-	15.6	23.4	30	0.76	208/3	2,3
RTU-6	CARRIER 48PG-04	2.5	R-410A	1000	0.6	180.0	850.0	72,000	58	110	31,600	80/62	51/50	-	15.0	18.9	25	0.35	208/3	2,3

1. UNIT TO HAVE FACTORY MOUNTED ENERGY RECORY UNIT WITH HEAT WHEEL. ERV SECTION TO HAVE EXHAUST/INTAKE FANS AND ECONOMIZER BYPASS.
2. UNIT TO HAVE FACTORY SUPPLIED CO2 SENSOR.
3. UNIT TO HAVE BAROMETRIC RELIEF ON ECONOMIZER.

EXHAUST FAN SCHEDULE

			AIR		FAN			ELECTRICAL			PHYSICAL	
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	MAXIMUM AIRFLOW RATE (CFM)	STATIC PRESSURE (IN. WATER)	OUTLET VELOCITY (FPM)	FAN SPEED (RPM)	FAN WHEEL DIAMETER (IN)	MOTOR SIZE (HP)	MOTOR SPEED (RPM)	VOLT/PH/HZ	LENGTH/ WIDTH/ HEIGHT (IN)	NOTES
EF-1	GREEN HECK GB-121	ROOF	1250	0.4	884	1350		0.25	1725	115/1/60	25/25/24	2,4
EF-2	GREEN HECK SP-B150	CEILING	150	0.2	800	1050		129 (watts)	1050	115/1/60	14/12/8	1,3,4
EF-3	GREEN HECK SP-B150	CEILING	150	0.2	800	1050		129 (watts)	1050	115/1/60	14/12/8	3,4,5

1. CONTROL WITH THERMOSTAT.
2. FAN TO RUN CONTINOUSLY WHEN OCCUPIED.
3. TERMINATE WITH ROOF CAP.
4. PROVIDE WITH CURB, BIRD SCREEN AND BACK DRAFT DAMPER.
5. CONTROL WITH WALL SWITCH.

SPLIT SYSTEM

			INDOOR UNIT							OUTDOOR UNIT						REFRIGERANT LINES		
MANUFACTURER	LOCATION	COOLING CAPACITY (BTU)	MODEL NUMBER	ID	CFM	DIMENSIONS W" x H" x D"	WEIGHT (LBS.)	AMPS (MCA)	VOLTS/PH/HZ.	MODEL NUMBER	ID	DIMENSIONS W" x H" x D"	WEIGHT (LBS.)	AMPS (MCA)	VOLTS/PH/HZ.	LIQUID	GAS	NOTES
MITSUBISHI	IT/ROOF	24,000	PKA-A24KA	AC-1	635-775	46X14X12	46	1.0	24/1/60	PUY-A24NHA3	CU-1	38X38X15	163	18	208/1//60	3/8	5/8	1,2,3,4,5

1. CAPACITIES RATED AT THE FOLLOWING OUTDOOR CONDITIONS: COOLING - 95 DEG. F. D.B., 75 DEG. F. W.B.
2. CAPACITIES RATED AT THE FOLLOWING INDOOR CONDITIONS: COOLING - 80 DEG. F. D.B., 67 DEG. F. W.B.
3. PROVIDE LOW AMBIENT HEAD CONTROLLER TO ALLOW COOLING OPERATION DOWN TO 0 DEG. F. D.B.
4. R410A REFRIGERANT.
5. WIRELESS REMOTE CONTROLLER. PROVIDE WALL MOUNTED HOLDER.

CONSTRUCTION DOCUMENTS

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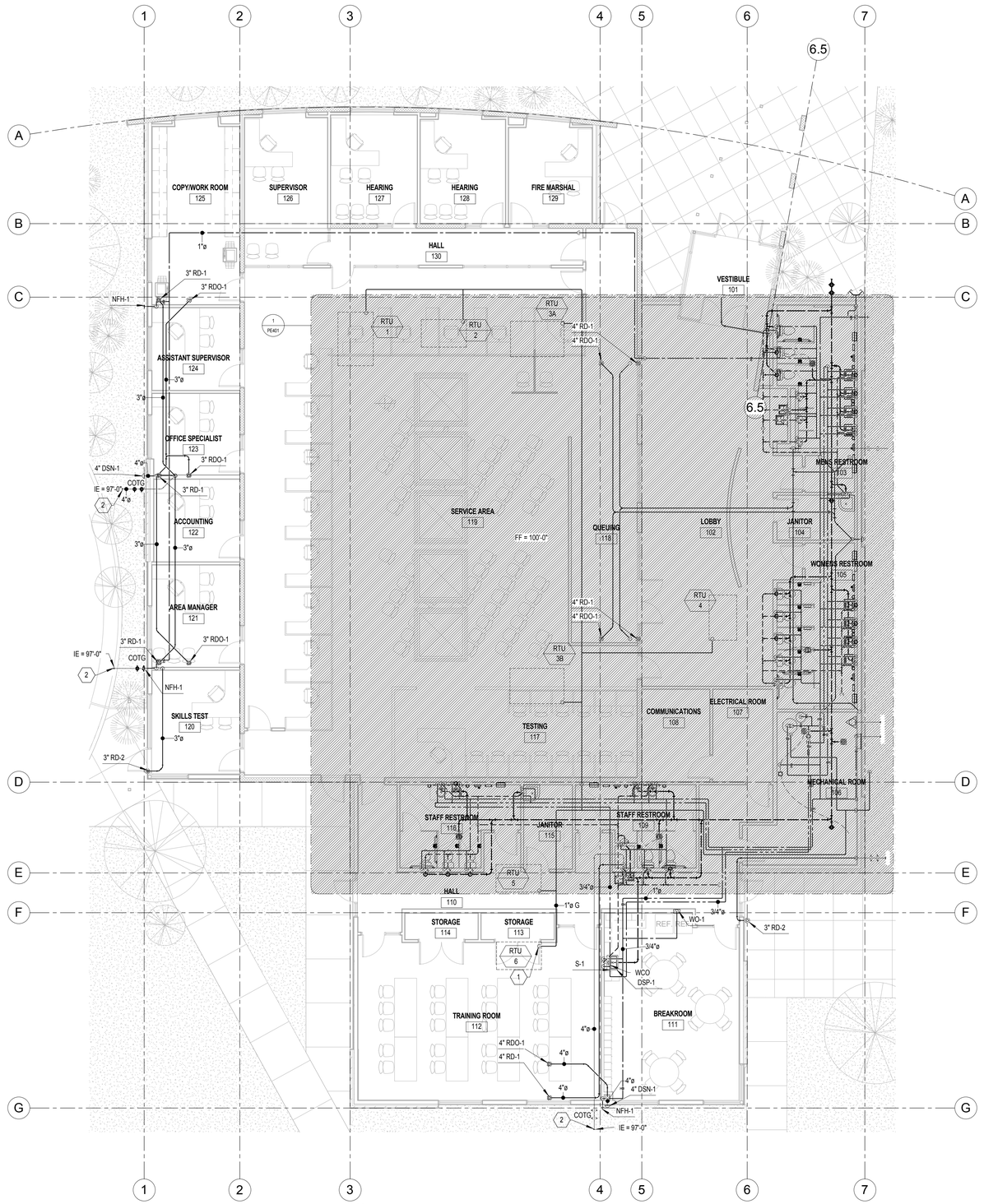
MECHANICAL SCHEDULES

ME601



1 PE101 MAIN LEVEL OVERALL PLUMBING PLAN

SCALE 1/8" = 1'-0"

KEYED NOTES

1 GAS CONNECTION TO EQUIPMENT ON ROOF, COORDINATE WITH EQUIPMENT.

2 SEE CIVIL UTILITIES PLAN FOR CONTINUATION.

CONSTRUCTION DOCUMENTS

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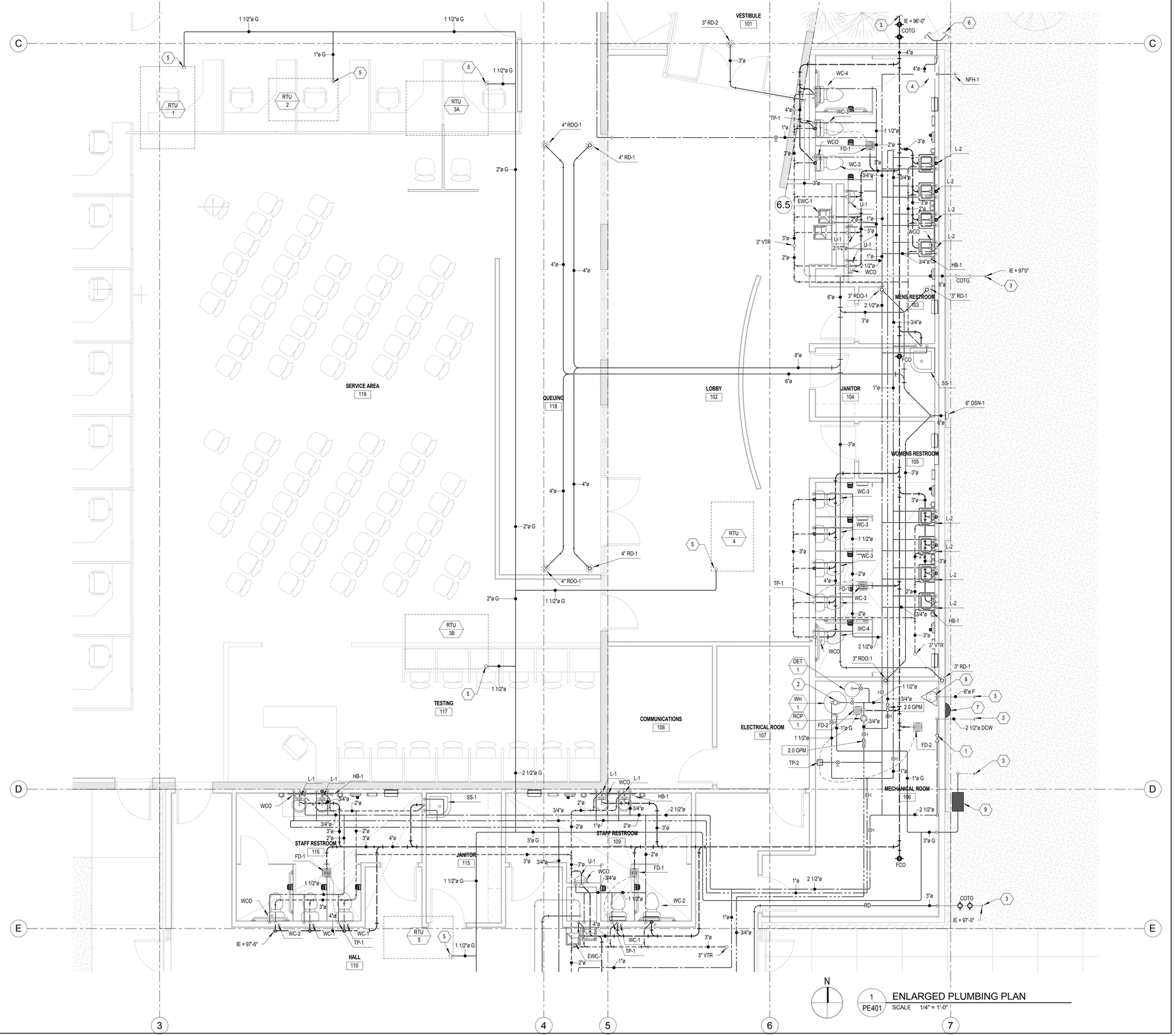
MAIN LEVEL OVERALL PLUMBING PLAN

PE101



KEYED NOTES

1. DOMESTIC WATER PRV, SEE DETAIL.
2. WATER HEATER FLUE UP TO ROOF, COORDINATE WITH MECHANICAL PLANS.
3. SEE CIVIL UTILITIES PLAN FOR CONTINUATION.
4. PROVIDE ACCESS PANEL FOR SHUT-OFF VALVES ABOVE HARD CEILINGS, TYPICAL.
5. GAS CONNECTION TO EQUIPMENT ON ROOF, COORDINATE WITH EQUIPMENT.
6. FLUSH MOUNT FIRE DEPARTMENT CONNECTION.
7. ELECTRONIC HORN/STROBE. COORDINATE WIRING WITH ELECTRICAL.
8. FIRE RISER, SEE DETAIL.
9. GAS METER, SEE DETAIL.

CONSTRUCTION DOCUMENTS

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VBFA Project Number: 10359

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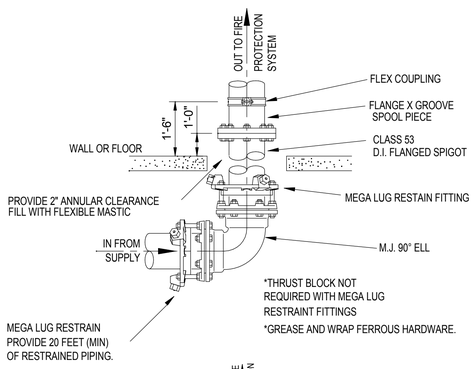
11-24-2010	10019

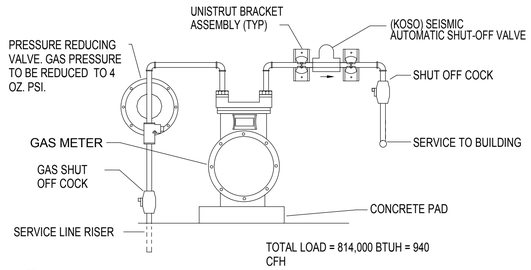
ENLARGED MAIN LEVEL PLUMBING PLAN

PE401



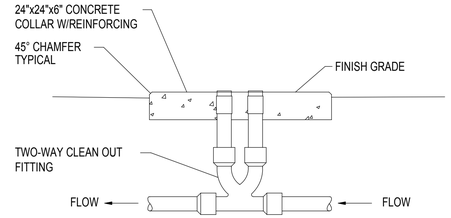
12 PE501 — FLANGED SPIGOT THROUGH FLOOR

NO SCALE



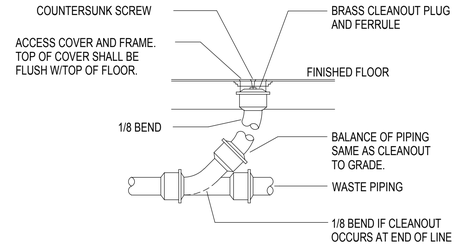
8 PE501 — GAS METER DETAIL

NO SCALE



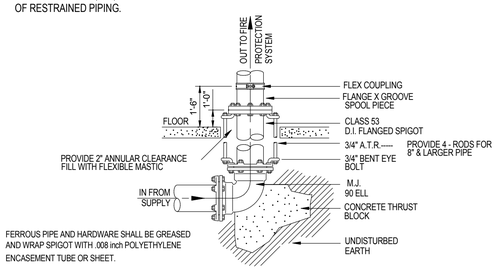
4 PE501 — CLEANOUT TO GRADE DETAIL (COTG)

NO SCALE



1 PE501 — FLOOR CLEANOUT DETAIL

NO SCALE



12 PE501 — FLANGED SPIGOT THROUGH FLOOR

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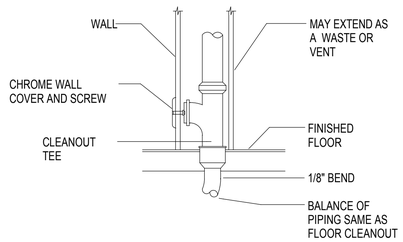
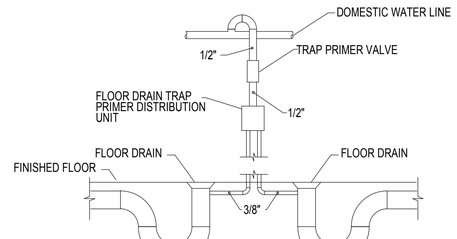


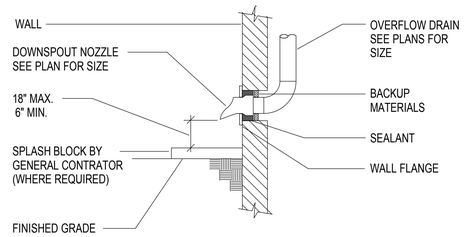
9 PE501 — WALL CLEANOUT DETAIL

NO SCALE



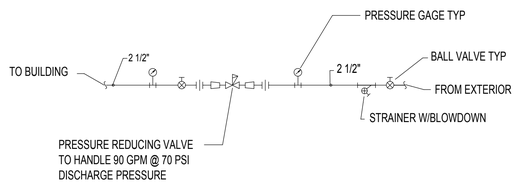
5 PE501 — TRAP PRIMER DETAIL

NO SCALE



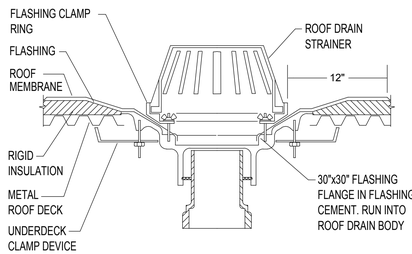
2 PE501 — DOWNSPOUT NOZZLE DETAIL

NO SCALE



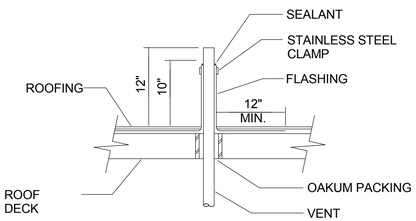
10 PE501 — PRV DETAIL

NO SCALE



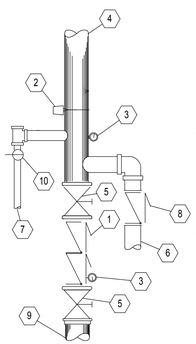
6 PE501 — ROOF DRAIN

NO SCALE



3 PE501 — VENT THRU ROOF FLASHING & SLEEVING DETAIL

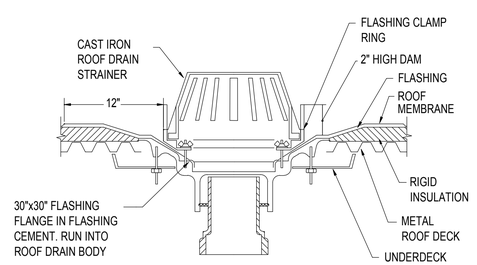
NO SCALE



1. DOUBLE CHECK VALVE ASSEMBLY
2. FLOW SWITCH TO HORN STROBE ALARM, WIRING BY DIVISION 26.
3. WATER PRESSURE GAGE
4. TO WET SYSTEM.
5. CONTROL VALVE WITH TAMPER SWITCH, WIRING BY DIVISION 26.
6. TO FIRE DEPARTMENT CONNECTION.
7. MAIN DRAIN PIPED TO EXTERIOR.
8. CHECK VALVE
9. FIRE LINE FROM SUPPLY. PROVIDE GALVANIZED PIPING UP TO VALVE ASSEMBLY. PROVIDE RESTRAINTS, FLEXIBLE COUPLINGS, AND ANNULAR CLEARANCE AS REQUIRED BY NFPA.
10. MAINTENANCE VALVE

11 PE501 — FIRE SPRINKLER RISER DETAIL

NO SCALE



7 PE501 — OVERFLOW ROOF DRAIN DETAIL

NO SCALE

BRANCH WATER LINE SCHEDULE

FIXTURE	FIXTURE UNITS	QUANTITY OF FIXTURES SERVED BY					
		1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
WATER CLOSET (FLUSH VALVE)	10	---	---	1	3	5	15
WATER CLOSET (TANK TYPE)	3	1	2	4	10	---	---
URINAL	5	---	1	2	6	10	30
LAVATORY	2	1	3	6	15	25	---
SERVICE SINK	4	---	1	3	---	---	---
QUANTITY OF FIXTURE UNITS SERVED BY	---	3	6	12	30	50	150

NOTE:
WHERE PIPING IS SIZED ON DRAWINGS IT SHALL BE FOLLOWED. OTHERWISE INSTALL ACCORDING TO TABLE. WHERE FIXTURES ON A BRANCH ARE MIXED, TAKE THE SUM OF FIXTURE UNITS TO DETERMINE SIZING. THE BRANCHES SHALL BE REDUCED AS THE LOAD IS TAKEN OFF. MINIMUM SIZE TO ONE (1) FIXTURE SHALL BE 1/2".

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PLUMBING DETAILS

PE501

PLUMBING FIXTURE SCHEDULE

ID	FIXTURE	CW (IN)	HW (IN)	W (IN)	V (IN)	NOTES	SPECIFICATIONS
DSN-1	DOWNSPOUT NOZZLE	-.-	-.-	-.-	-.-	SEE PLANS FOR SIZE	DOWNSPOUT NOZZLE: SMITH 1770 DOWNSPOUT NOZZLE WITH CAST BRONZE BODY AND FLANGE.
DSP-1	GARBAGE DISPOSER	-.-	-.-	1 1/2	1 1/2	120 V/60 Hz/1 Ph.	GARBAGE DISPOSER: INSINKERATOR BADGER 5 FOOD WASTE DISPOSER WITH 1/2 HORSEPOWER MOTOR, 120 VOLT/1 PHASE POWER CONNECTION, 6.9 AMPS. PROVIDE WITH WALL SWITCH.
EWC-1	ELECTRIC WATER COOLER	1/2	-.-	1 1/2	1 1/2	ADA, DUAL STATION, RECESSED COOLER	ELECTRIC WATER COOLER: ELKAY ERPBM28RAK DUAL STATION, WALL MOUNTED, BARRIER FREE, ADA ELECTRIC WATER COOLER WITH FLEXIBLE BUBBLER GUARD, STAINLESS STEEL BOWLS AND RECESSED REFRIGERATION SYSTEM. COMPRESSOR TO BE 115V, 60 HZ WITH CAPACITY TO DELIVER AT LEAST 8.0 GPH OF 50F WATER. 1-1/2" CAST BRASS CHROME-PLATED P-TRAPS. ADA SIDE TO BE ON THE LEFT.
FD-1	FLOOR DRAIN	-.-	-.-	2	2	RESTROOM	FLOOR DRAIN (RESTROOM): SMITH FIGURE 2005Y-P050 FLOOR DRAIN WITH CAST IRON BODY AND FLASHING COLLAR WITH ROUND NICKEL BRONZE ADJUSTABLE STRAINER HEAD WITH SECURED GRATE AND TRAP PRIMER CONNECTION.
FD-2	FLOOR DRAIN	-.-	-.-	2	2	MECHANICAL ROOM	FLOOR DRAIN (MECHANICAL ROOM): SMITH 2220Y-P050 FLOOR DRAIN WITH CAST IRON BODY AND FLASHING COLLAR WITH 8" CAST IRON GRATE AND SEDIMENT BUCKET, 3" OUTLET, NO-HUB CONNECTION; PROVIDE P-TRAP WITH TRAP PRIMER CONNECTION.
HB-1	HOSE BIB	3/4	-.-	-.-	-.-	-.-	HOSE BIBB: ACORN 8126 HOSE VALVE WITH VACUUM BREAKER, 3/4" MALE HOSE THREAD AND LOOSE KEY HANDLE.
L-1	STAFF LAVATORY	1/2	1/2	1 1/2	1 1/2	COUNTER MOUNTED	LAVATORY (COUNTER MOUNTED): KOHLER K-2196-4 PENNINGTON SELF RIMMING VITREOUS CHINA OVAL LAVATORY WITH 4" FAUCET CENTERS; K-7715 OPEN GRID STRAINER; TECHNICAL CONCEPTS 500484 MILANO BATTERY POWERED SENSOR FAUCET WITH 0.5 GPM VANDAL RESISTANT AERATOR. FAUCET TO BE PROVIDED WITH FACTORY MIXING VALVE WITH 3/8" COMPRESSION CONNECTIONS AND IN-LINE CHECKS. PROVIDE WATTS NO. 7 DUAL CHECKS IN HOT AND COLD SUPPLIES. PROVIDE LOOSE KEY ANGLE STOPS AND CHROME PLATED COPPER SUPPLIES AND 17 GA. CAST BRASS, CHROME PLATED "P" TRAP. COVER ALL EXPOSED PIPING WITH WHITE "HANDI-LAV GUARD" PROTECTOR AS NEEDED TO MEET ADA REQUIREMENTS.
L-2	PUBLIC LAVATORY	1/2	1/2	1 1/2	1 1/2	WALL HUNG	LAVATORY (WALL HUNG): KOHLER K-2032 GREENWICH 20" X 18", "D" SHAPED BOWL, VITREOUS CHINA, WALL-MOUNT LAVATORY WITH DUAL FRONT OVERFLOW, 4" FAUCET CENTERS; K-7715 OPEN GRID STRAINER; TECHNICAL CONCEPTS 500484 MILANO BATTERY POWERED SENSOR FAUCET WITH 0.5 GPM MAXIMUM FLOW. FAUCET TO BE PROVIDED WITH FACTORY MIXING VALVE WITH 3/8" COMPRESSION CONNECTIONS AND IN-LINE CHECKS. PROVIDE WATTS NO. 7 DUAL CHECKS IN HOT AND COLD SUPPLIES. PROVIDE VANDAL RESISTANT AERATOR. PROVIDE LOOSE KEY ANGLE STOPS AND CHROME PLATED COPPER SUPPLIES AND 17 GA. CAST BRASS, CHROME PLATED "P" TRAP. COVER ALL EXPOSED PIPING WITH WHITE "HANDI-LAV GUARD" PROTECTOR TO MEET ADA REQUIREMENTS.
NFH-1	NON FREEZE WALL HYDRANT	3/4	-.-	-.-	-.-	-.-	NON-FREEZE HYDRANT: SMITH 5609QT NON-FREEZE WALL HYDRANT FOR WALL THICKNESS SHOWN ON PLAN. BRONZE HYDRANT, 3/4-INCH CONNECTION WITH BRASS CASING, INTEGRAL SELF-DRAINING VACUUM BREAKER, AND LOOSE KEY.
RD-1	ROOF DRAIN	-.-	-.-	-.-	-.-	SEE PLANS FOR SIZE	ROOF DRAIN: SMITH FIGURE 1010Y CAST IRON BODY WITH COMBINED FLASHING CLAMP AND CAST IRON GRAVEL STOP, CAST IRON DOME, SUMP RECEIVER AND UNDERDECK CLAMP.
RD-2	ROOF DRAIN	-.-	-.-	-.-	-.-	SEE PLANS FOR SIZE	ROOF DRAIN: SMITH FIGURE 1540T CAST IRON BODY WITH COMBINED FLASHING CLAMP AND LOOSE SET GRATE.
RDO-1	ROOF DRAIN OVERFLOW	-.-	-.-	-.-	-.-	SEE PLANS FOR SIZE	ROOF DRAIN OVERFLOW: SMITH FIGURE 1080Y CAST IRON BODY WITH COMBINED FLASHING CLAMP AND CAST IRON GRAVEL STOP, CAST IRON DOME, 2" HIGH WATER COLLAR, SUMP RECEIVER AND UNDERDECK CLAMP.
S-1	KITCHEN SINK	1/2	1/2	2	1 1/2	COUNTER MOUNTED, SINGLE COMPARTMENT	SINK: JUST SL-2017-A-GR 14" X 14" X 7-1/2" DEEP, 18-GAUGE, TYPE 304 STAINLESS STEEL, COUNTER MOUNTED SINK WITH 8" CENTERS DRILLING;CHICAGO 1100-CP FAUCET, 2" INDEXED SINGLE WING CANOPY HANDLES, L8 SWING SPOUT WITH 2.2 GPM PRESSURE COMPENSATING AERATOR; FLEXIBLE STAINLESS STEEL SUPPLIES WITH LOOSE KEY ANGLE STOPS; JUST J-35 STAINLESS STEEL CUP STRAINER AND CAST BRASS P-TRAP WITH CLEAN-OUT PLUG.
SS-1	SERVICE SINK	3/4	3/4	3	2	-.-	JANITOR SINK (FLOOR MOUNTED, CORNER): KOHLER K6710, WHITBY, 28 X 28-INCH, ENAMELED CAST IRON FLOOR-MOUNTED CORNER MODEL, K9146-3" DRAIN WITH STRAINER, NO. K8940 REMOVABLE VINYL-COATED RIM GUARD; CHICAGO 897 FAUCET WITH VACUUM BREAKER; SCREWDRIVER STOPS IN SHANKS, 5 FOOT RUBBER HOSE AND WALL HOOK, 853.
TP-1	TRAP PRIMER	1/2	-.-	-.-	-.-	FLUSH VALVE TYPE	TRAP PRIMER: PRECISION PLUMBING PRODUCTS, INC. (PPP) FVP-1VB FLUSH VALVE PRIMER FOR ONE DRAIN; 1/2" COPPER TUBE CONNECTION TO FLOOR DRAIN P-TRAP, INSTALL PER MANUFACTURER'S INSTRUCTIONS.
TP-2	TRAP PRIMER	1/2	-.-	-.-	-.-	SOLINOID TYPE, 115V	TRAP PRIMER: PRECISION PLUMBING PRODUCTS, INC. (PPP) MPB-500-115V MINI-PRIME ELECTRONIC TRAP PRIMING MANIFOLD WITH TIMER AND BOX; FOR 1 TO 4 FLOOR DRAINS; 1/2" COPPER TUBE CONNECTION TO EACH FLOOR DRAIN P-TRAP, PROVIDE DISTRIBUTION UNITS AS NEEDED FOR NUMBER OF FLOOR DRAINS SERVED, INSTALL PER MANUFACTURER'S INSTRUCTIONS.
U-1	URINAL	3/4	-.-	2	2	WALL HUNG, 1/8 GPF, ADA	URINAL: ZURN Z5798 VITREOUS CHINA ADA URINAL WITH 3/4" TOP SPUD, EXPOSED 0.125 GPF BATTERY POWERED SENSOR FLUSH VALVE; SMITH 0637 URINAL SUPPORT. SEE ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS.
WC-1	STAFF WATER CLOSET	1	-.-	4	2	FLOOR MOUNTED, MANUAL DUAL FLUSH VALVE	WATER CLOSET: KOHLER K-4350 WELCOMME VITREOUS CHINA, FLOOR MOUNTED, ELONGATED BOWL TOILET WITH K-4670-C LUSTRA OPEN FRONT SEAT; SLOAN UPPERCUT WES-111 MANUAL DUAL FLUSH, 1.6 GPF AND 1.1 GPF FLUSH VALVE; INSTALL ACTUATOR ON WIDE SIDE OF FIXTURE.
WC-2	STAFF WATER CLOSET	1	-.-	4	2	ADA, FLOOR MOUNTED, MANUAL DUAL FLUSH VALVE	WATER CLOSET: KOHLER K-4368 KINGSTON VITREOUS CHINA, FLOOR MOUNTED, ELONGATED BOWL, ADA TOILET WITH K-4670-C LUSTRA OPEN FRONT SEAT; SLOAN UPPERCUT WES-111 MANUAL DUAL FLUSH, 1.6 GPF AND 1.1 GPF FLUSH VALVE; INSTALL ACTUATOR ON WIDE SIDE OF FIXTURE.
WC-3	PUBLIC WATER CLOSET	1	-.-	4	2	FLOOR MOUNTED, SENSOR DUAL FLUSH VALVE	WATER CLOSET: KOHLER K-4350 WELCOMME VITREOUS CHINA, FLOOR MOUNTED, ELONGATED BOWL TOILET WITH K-4670-C LUSTRA OPEN FRONT SEAT; SLOAN ECOS 8111-1.6/1.1 ELECTRONIC DUAL FLUSH, BATTERY POWERED, SIDE MOUNT SENSOR OPERATED, 1.6 GPF AND 1.1 GPF FLUSH VALVE; INSTALL ACTUATOR ON WIDE SIDE OF FIXTURE.
WC-4	PUBLIC WATER CLOSET	1	-.-	4	2	ADA, FLOOR MOUNTED, SENSOR DUAL FLUSH VALVE	WATER CLOSET: KOHLER K-4368 KINGSTON VITREOUS CHINA, FLOOR MOUNTED, ELONGATED BOWL, ADA TOILET WITH K-4670-C LUSTRA OPEN FRONT SEAT; SLOAN ECOS 8111-1.6/1.1 ELECTRONIC DUAL FLUSH, BATTERY POWERED, SIDE MOUNT SENSOR OPERATED, 1.6 GPF AND 1.1 GPF FLUSH VALVE; INSTALL ACTUATOR ON WIDE SIDE OF FIXTURE.
WO-1	WATER OUTLET	1/2	-.-	-.-	-.-	REFRIGERATOR CONNECTION	WATER OUTLET: LSP OB-801 PLASTIC ICEMAKER BOX WITH QUARTER TURN BALL VALVE WITH 1/4" OUTLET.

1. ALL UNDER GROUND WASTE AND VENT SHALL BE 2" OR GREATER PER DRAWINGS.

DOMESTIC EXPANSION TANK SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	WORKING FLUID	PHYSICAL TANK SIZE (GAL)	RELIEF VALVE (PSIG)	DIA./ HEIGHT (IN)	NPT FITTING (IN)	NOTES
DET-1	AMTROL ST-12	MECHANICAL ROOM	BUTYL DIAPHRAGM	DOMESTIC HOT WATER	4.4	150	11/15	3/4	1

1. TANK LINER SUITABLE FOR POTABLE WATER

DOMESTIC PUMP SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FLUID FLOW RATE (GPM)	FLUID WORKING FLUID	FLUID HEAD LOSS (FT)	PUMP CONSTRUCTION	ELECTRICAL MOTOR SIZE (HP)	ELECTRICAL MOTOR SPEED (RPM)	ELECTRICAL VOLT/PH/HZ	NOTES
RCP-1	B&G PL-30	MECHANICAL ROOM	CIRCULATION	4	DOMESTIC HOT WATER	10	BRONZE	1/12	2650	120/1/60	-.-

GAS FIRED WATER HEATER SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	SERVICE	INPUT LOAD (BTUH)	EFFICIENCY (%)	TYPE	RECOVERY RATE @ 100 F DELTA T	TANK SIZE (GAL)	FLUE SIZE (IN)	HEIGHT/ DIAMETER (IN)	NOTES
WH-1	AO SMITH BT-65	DOMESTIC HOT WATER	65,000	80	TANK	60	65	4	65/24	-.-

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11-24-2010	10019

PLUMBING SCHEDULES

PE601

FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANFR.	MODEL	CAT No.	VOLTS	LAMP #	LAMP	TEMP
A	2 X 4 RECESSED FLUORESCENT, GRID MOUNT CENTER BASKET, PERFORATED BLADE LOUVER 2 LAMP T8.	LITHONIA	AVANTE	2AV-F-3-32-SBL-120.71 BF PROGRAM	120 V	2	F32T8/XPS/ECO	3200 K
A1	1X4 RECESSED FLUORESCENT, FLANGE MOUNT A12.125 LENS, 2 LAMP T8, .71 B.F.	LITHONIA	AVANTE	SP8-F-2-32-RW-A12125-120 .71 B.F. PROGRAM START	120 V	2	F32T8/XPS/ECO	3200 K
A2	2 X 4 RECESSED FLUORESCENT, GRID MOUNT CENTER BASKET, PERFORATED BLADE LOUVER 2 LAMP T8. BI-LEVEL BALLAST	LITHONIA	AVANTE	2AV-G-2-32-SBL-120-BI-LEVEL BALLAST	120 V	2	F32T8/XPS/ECO	3200 K
A2a								
A3	SAME AS A2 EXCEPT 3 LAMP T8, BI-LEVEL SWITCHING	LITHONIA	AVANTE	2AV-G-3-32-SBL-MVOLT-BI-LEVEL SWITCHING	120 V	3	F32T8/XPS/ECO	3200 K
A4	4 X 4 RECESSED INDIRECT, GRID MOUNT PERFORATED BASKET ON ALL 4 SIDES 4 LAMP T8, 0-10 VOLT DIMMING BALLAST CONTROL WITH DAYLIGHT SENSOR	FOCAL POINT	SKY	FSK-44-B-4-T5-D-277-G-PS-WH 0-10 VOLT DIMMING BALLAST	120 V	4	F32T8/XPS/ECO	3200 K
C	SURFACE FLUORESCENT DRUM	KENALL	MILLUNIUM	MR13FL-LG-P1A-32P-1-120	120 V	1	CFM32W/GX24Q-1	3200 K
CF	54" CEILING FAN	MODERN FAN	ALTUS	BA-52-AL-ORB-NL-001	120 V	0		3200 K
D6	6 INCH RECESSED COMPACT FLUORESCENT (1) 32 TRT HORIZONTAL LAMP DIFFUSE AR REFLECTOR FINISH	GOTHAM	AF	AF-1/32TRT-6AR-LD-120	120 V	1	CFM32W/GX24Q-1	3200 K
O1	20' SINGLE POLE, TYPE IV SC 200 WATT MH PULSE START STANDARD COLOR BY ARCHITECT	LITHONIA	KSF	KSF1-200M-R4SC-208-SP04-SCWA-DF-SC BA-LPI-SSS-20-4G-DM19	208 V	1	200 WATT PSMH INCLUDED	3200 K
O2	20' DOUBLE POLE, TYPE IV SC 200 WATT MH PULSE START STANDARD COLOR BY ARCHITECT	LITHONIA	KSF	KSF1-200M-R4SC-208-SP04-SCWA-DF-SC BA-LPI SSS-20-4G-DM28	208 V	2	200 WATT PSMH INCLUDED	3200 K
OF	FLAG POLE FLOOD LIGHT	GARDCO	DF7	DF7ST-HSP-70W-MH-120-OC-F	120 V	1	70 W MH	3200 K
S1	2 LAMP STRIP WITH WIRE GUARD PROVIDE CHAIN HANGERS FOR PLACES WHERE PROVIDE CHAIN HANGERS FOR PLACES WHERE	LITHONIA	C	C-2-32-120-WGCUN-HC36 .71 B.F. PROGRAM START	120 V	2	FO32T8/XPS/ECO/ 35K	3200 K
SC1	EXTERIOR WALL MOUNT SCONCE (2) 32 TRT O DEGREE BALLAST STANDARD COLOR BY ARCHITECT	LITHONIA	WSR	WSR-2-32-MD-120-DFL-ELDWC-SCBA	120 V	2	CFM32W/GX24Q-1	3200 K
UC2	2' UNDERCABINET LIGHT LIGHT FIELD MEASURE CABINET LENGTH BEFORE ORDERING	LITHONIA	N25	N25-25-120-GEB-RS	120 V	1	F25T8/XPS-ECO	3000 K
X1	SINGLE FACE DIE CAST EXIT GREEN LETTERS, SEE PLANS FOR MOUNTING AND ARROWS STANDARD COLOR BY ARCHITECT	LITHONIA	LE	LE-S-SCBA-1-G-120/277	120 V	1	LED INCLUDED	3200 K

LIGHT FIXTURE ABBREVIATION SCHEDULE

NOTE: NOT ALL ABBREVIATIONS WILL NECESSARILY BE USED.

A.F.F.	ABOVE FINISH FLOOR
WALL@CLG	WALL MOUNT AT CORNER OF WALL AND CEILING
CCBA	CUSTOM PAINTED COLOR AS SELECTED BY THE ARCHITECT
SCBA	STANDARD PAINTED COLOR AS SELECTED BY THE ARCHITECT
CFBA	CUSTOM FINISH AS SELECTED BY THE ARCHITECT
SFBA	STANDARD FINISH AS SELECTED BY THE ARCHITECT
MOD	MODIFY STANDARD LIGHT FIXTURE AS INDICATED

LIGHT FIXTURE GENERAL NOTES

1. REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS FOR LOCATIONS OF LIGHT FIXTURES. BRING ALL DISCREPANCIES OF LOCATIONS AND QUANTITIES TO THE ATTENTION OF THE ARCHITECT AND ELECTRICAL ENGINEER PRIOR TO BIDDING.
2. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHTS AND LOCATIONS OF LIGHT FIXTURES. BRING ALL DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT PRIOR TO BIDDING.
3. REFER TO THE SPECIFICATIONS FOR OTHER LIGHT FIXTURE, FUSING, BALLAST, AND LAMP REQUIREMENTS AND ACCEPTABLE MANUFACTURERS.
4. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR LOUVER REQUIREMENTS AS REQUIRED.
5. CONFIRM AVAILABLE MOUNTING DEPTHS OF ALL LIGHT FIXTURES AND COMPARE WITH DEPTHS SHOWN ON SHOP DRAWINGS. BRING ALL POTENTIAL CONFLICT AREAS TO THE ATTENTION OF THE ARCHITECT AND ELECTRICAL ENGINEER PRIOR TO RELEASE.

BIDDING REQUIREMENTS

1. BID ONLY PRODUCTS THAT ARE SPECIFIED OR APPROVED BY ADDENDUM.
2. PACKAGING OF LIGHT FIXTURES WITH OTHER SYSTEMS IS NOT ALLOWED.
3. WHEN ONLY ONE PRODUCT IS APPROVED FOR BIDDING, THE PRICE FOR THAT ITEM SHALL BE BROKEN OUT SEPARATELY WHEN SUBMITTING PRICING TO VARIOUS DISTRIBUTORS AND/OR CONTRACTORS.
4. WHEN A CONTRADICTION EXISTS BETWEEN A SPECIFIC MODEL NUMBER AND THE DESCRIPTION, THE DESCRIPTION SHALL GOVERN.

PRIOR APPROVAL REQUIREMENTS

1. PRIOR APPROVAL IS REQUIRED BEFORE BIDDING THIS PROJECT.
2. PRIOR APPROVALS SHALL BE SUBMITTED TO THE ELECTRICAL ENGINEER'S OFFICE AT LEAST (8) EIGHT WORKING DAYS BEFORE THE BID. PRIOR APPROVALS RECEIVED AFTER THIS TIME PERIOD SHALL BE REJECTED.
3. PRIOR APPROVALS SHALL BE SIGNED BY A PRINCIPAL OF THE SUBMITTING ORGANIZATION STATING THAT THEY HAVE PREPARED AND/OR REVIEWED THE SUBMITTAL AND THAT THE PRODUCTS PROPOSED ARE EQUIVALENT TO THOSE SPECIFIED. ANY EXCEPTIONS SHALL BE SO NOTED.
4. ITEMS THAT ARE SUBMITTED AND HAVE BEEN APPROVED WILL BE LISTED IN THE ADDENDUM(S). VERBAL APPROVAL WILL NOT BE GIVEN ON ANY ITEM.
5. IT IS NOT THE RESPONSIBILITY OF THE ELECTRICAL ENGINEER TO NOTIFY THE SUBMITTING PARTY OF ERRORS IN THE SUBMITTAL. NOTIFICATION OF ERRORS BY THE ELECTRICAL ENGINEER PRIOR TO ISSUANCE OF THE ADDENDUM(S) MAY NOT BE GIVEN.
6. PRIOR APPROVALS SHALL CONSIST OF TWO SETS OF CUT SHEETS DESCRIBING THE PRODUCTS BEING SUBMITTED AS EQUIVALENTS. FAXES ARE NOT ACCEPTABLE. ALL SPECIFICATION INFORMATION SHALL BE CLEARLY MARKED, WITH NON-APPLICABLE INFORMATION CROSSED OUT. COMPLETE PHOTOMETRIC DATA SHALL BE PROVIDED. PRODUCTS WITHOUT PHOTOMETRIC DATA WILL NOT BE APPROVED.
7. SUPPLY POINT-BY-POINTS AS REQUIRED BY THE ELECTRICAL ENGINEER AND/OR LIGHTING DESIGNER.
8. SAMPLE FIXTURES MUST BE SUPPLIED WITH A CORD, PLUG AND 120V BALLAST.

LIGHTING SHOP DRAWING REQUIREMENTS

1. REFER TO SPECIFICATIONS 16001, 16510 & 16551.
2. MUST INCLUDE BALLAST AND LAMP CUT SHEETS.
3. LINEAR LIGHTING MUST INCLUDE DETAILED DRAWINGS WITH SUPPORT DETAILS, STEM LOCATIONS AND HAVE ALL LENGTHS IDENTIFIED WITH STEM LOCATIONS.
4. COLOR SAMPLES MUST BE INCLUDED IN FIRST SUBMITTAL.
5. CUT SHEETS MUST BE STAMPED WITH THE FACTORY REPRESENTATIVE'S COMPANY NAME.
6. VALUE ENGINEERING CONDUCTED WITHOUT THE DESIGN TEAM IE; ARCHITECT, OWNER, ENGINEER & LIGHTING CONSULTANT/DESIGNER WILL NOT BE ALLOWED, REVIEWED OR APPROVED.
7. PROVIDE A LIST OF SPARE PARTS, EQUIPMENT & LAMPS.

EQUIPMENT SCHEDULE

UNIT #	FUNCTION	LOAD	VOLT	PHASE	FULL LOAD AMPS	CONDUIT SIZE	WIRES: NO. SETS	WIRES: NO.	WIRES: SIZE	WIRES: EQUIP. GND (1)	OCPD: TYPE	OCPD: AMPS	REF. NOTES: STARTER	REF. NOTES: DISCONNECT	REF. NOTES: OTHER	REMARKS
AC-1	SPLIT AC UNIT INDOOR	1	24	1										11A		WIRE THROUGH OUTDOOR UNIT
CU-1	CONDENSING UNIT OUTDOOR	18 MCA	208	1	14.40	3/4"	1	2	12	12	CB	25		2A		
EF-1	EXHAUST FAN	.25 HP	120	1	5.80	3/4"	1	2	12	12	CB	15		4A		
EF-2	EXHAUST FAN	130 VA	120	1	1.08	3/4"	1	2	12	12	CB	15		4A		
EF-3	EXHAUST FAN	130 VA	120	1	1.08	3/4"	1	2	12	12	CB	15		4A		
RCP-1	RECIRCULATING PUMP	1/12 HP	120	1	3.00	3/4"	1	2	12	12	CB	15		4A		
RTU-1	ROOFTOP UNIT	34.3 MCA	208	3	27.44	3/4"	1	3	6	10	CB	50		2A		
RTU-2	ROOFTOP UNIT	18.9 MCA	208	3	15.12	3/4"	1	3	10	10	CB	25		2A		
RTU-3A	ROOFTOP UNIT	61.2 MCA	208	3	48.96	1"	1	3	4	8	CB	70		2A		
RTU-3B	ROOFTOP UNIT	61.2 MCA	208	3	48.96	1"	1	3	4	8	CB	70		2A		
RTU-4	ROOFTOP UNIT	23.4 MCA	208	3	18.72	3/4"	1	3	10	10	CB	30		2A		
RTU-5	ROOFTOP UNIT	23.4 MCA	208	3	18.72	3/4"	1	3	10	10	CB	30		2A		
RTU-6	ROOFTOP UNIT	18.9 MCA	208	3	15.12	3/4"	1	3	10	10	CB	25		2A		
TP-2	TRAP PRIMER	1 FLA	120	1	1.00	3/4"	1	2	12	12	CB	15		11A		

NOTES:
1. NON-FUSED DISCONNECT SWITCH
2. FUSED DISCONNECT SWITCH
3. BREAKER IN ENCLOSURE
4. MANUAL STARTER W/THERMAL OVERLOAD
5. MAGNETIC STARTER
6. MAGNETIC STARTER/NON-FUSED DISCONNECT COMBINATION
7. MAGNETIC STARTER/FUSED DISCONNECT COMBINATION
8. MAGNETIC STARTER/BREAKER COMBINATION
9. VARIABLE FREQUENCY DRIVE
10. REDUCED VOLTAGE STARTER
11. DIRECT CONNECTION
12. RECEPTACLE/SPECIAL PURPOSE OUTLET/ETC.
13. TWO-SPEED STARTER, COORDINATE W/MOTOR TYPE
14. SOLID STATE SOFT STARTER

A. FURNISHED, INSTALLED, AND CONNECTED UNDER DIVISION 16
B. FURNISHED AND INSTALLED UNDER ANOTHER DIVISION REQUIRING CONNECTION UNDER DIVISION 16.
C. FURNISHED UNDER ANOTHER DIVISION BUT INSTALLED AND CONNECTED UNDER DIVISION 16.
D. FURNISHED, INSTALLED AND CONNECTED UNDER ANOTHER DIVISION.

CB = CIRCUIT BREAKER - THERMAL MAGNETIC
CKW = CHILLER KILOWATTS

NOTE 1: PER 250.122(A), EQUIPMENT GROUND IS NOT REQUIRED TO BE LARGER THAN PHASE CONDUCTOR.

ELECTRICAL SYMBOL SCHEDULE

1. SEE FIXTURE SCHEDULE FOR TYPE, MOUNTING AND WATTAGE.
2. HEIGHT MEASURED TO CENTER LINE OF THE BOX FROM THE FINISH FLOOR.
3. REFER TO DRAWINGS FOR DIRECTIONAL ARROWS.
4. SUBSCRIPT KEYS SWITCH TO FIXTURES CONTROLLED.
5. NEMA TYPE 'ND' NON-FUSED UNLESS NOTED 'F' (FUSED). USE 'HD' 480 V.
6. HEIGHT TO BE THE LOWER OF EITHER 80" A.F.F. OR 6" BELOW CEILING.
7. PROVIDE H.O.A. AND S.S. PUSHBUTTONS AS REQUIRED.
8. DOUBLE ARROWS DENOTE A DOUBLE FACE UNIT.
9. COORDINATE WITH MILLWORK SHOP DRAWINGS AND ELEVATIONS FOR HEIGHT.
10. SUBSCRIPT DENOTES NEMA CONFIGURATION.
11. HEIGHT MEASURED TO BOTTOM OF THE BOX FROM FINISH FLOOR.

STANDARD MOUNTING HEIGHT UNLESS OTHERWISE NOTED ON PLANS

SYMBOL	DESCRIPTION	MOUNTING HEIGHT	NOTES
	ONE CIRCUIT, TWO WIRE HOME RUN TO PANEL		
	2 CIRCUIT, 3 WIRE, COMMON NEUTRAL HOME RUN		
	3 CIRCUIT, 4 WIRE, COMMON NEUTRAL HOME RUN		
	CONDUIT RUN CONCEALED IN WALL OR CEILING		
	CONDUIT RUN CONCEALED IN FLOOR OR GROUND		
	CONDUIT UP		
	CONDUIT DOWN		
	CONDUIT STUB LOCATION	CAP CONDUIT	
	CABLE TRAY	AS NOTED	
	CEILING LIGHT FIXTURE	CEILING	1.
	WALL LIGHT FIXTURE	AS NOTED	1.
	RECESSED DOWNLIGHT FIXTURE	CEILING	1.
	RECESSED WALLWASH DOWNLIGHT FIXTURE	CEILING	1.
	FLUORESCENT LIGHT FIXTURE	AS NOTED	1
	FLUORESCENT EGRESS LIGHT FIXTURE	AS NOTED	UNSWITCHED
	AREA LIGHT POLE AND FIXTURE	CONCRETE BASE	SEE DIAGRAM
	CEILING MOUNTED EXIT LIGHT	CEILING	1.3.8.
	WALL MOUNTED EXIT LIGHT	AS NOTED	1.3.8.
$	SINGLE POLE SWITCH	+4'-0"	2.
$a	SINGLE POLE SWITCH	+4'-0"	4. 2.
$3	THREE-WAY SWITCH	+4'-0"	2.
$4	FOUR-WAY SWITCH	+4'-0"	2.
$P	SWITCH WITH PILOT LIGHT	+4'-0"	2.
	MOMENTARY CONTACT SWITCH, CENTER POSITION OFF	+4'-0"	2.
	SINGLE GANG LV LIGHTING CONTROL WITH MULTIPLE BUTTONS	+4'-0"	2.
	OCCUPANCY SENSOR	CEILING	
	OCCUPANCY SENSOR	+4'-0"	2.
PP	POWER PACK	CEILING	SEE DIAGRAM, SPEC.
	DUPLEX RECEPTACLE	+16" OR AS NOTED	9. 11.
A	DUPLEX RECEPTACLE		9.
W	ELECTRIC WATER COOLER RECEPTACLE		SEE DIAGRAM
WP	WEATHERPROOF RECEPTACLE	+24" OR AS NOTED	2. 9.
	GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE	+16" OR AS NOTED	9. 11.
	DUPLEX RECEPTACLE EMERGENCY POWER (RED)	+16" OR AS NOTED	9. 11.
	FOURPLEX RECEPTACLE	+16" OR AS NOTED	9. 11.
	FOURPLEX RECEPTACLE EMERGENCY POWER (RED)	+16" OR AS NOTED	9. 11.
	FLOOR OUTLET WITH 20A DEVICE	FLOOR	
	MULTIPLE SERVICE FLOOR BOX	FLOOR	
	SPECIAL PURPOSE OUTLET	+16" OR AS NOTED	10. WITH CAP. 11.
	TELEVISION OUTLET	+16" OR AS NOTED	11.
	DATA OUTLET	+16" OR AS NOTED	9. 11.
	TELEPHONE OUTLET	+16" OR AS NOTED	9. 11.

SYMBOL	DESCRIPTION	MOUNTING HEIGHT	NOTES
	TELEPHONE/DATA OUTLET	+16" OR AS NOTED	9. 11.
	WIRELESS ACCESS POINT	CEILING	
J	JUNCTION BOX ('F' IN FLOOR)	AS NOTED	
	MOTOR OUTLET	TO SUIT EQUIP.	
P	PHOTO-ELECTRIC CONTROL	AS NOTED	TORK 2000A
D	DIGITAL DAY-LIGHT SENSOR	CEILING	SEE DIAGRAM, SPECIFICATION
TC	TIME CLOCK	+5'-0"	2.
	PUSHBUTTON	+4'-0"	2.
P	PANIC BUTTON	+4'-0"	2.
	NON-FUSED DISCONNECT SWITCH	+5'-0"	5.
F	FUSED DISCONNECT SWITCH	+5'-0"	5.
$T	MANUAL STARTER THERMAL OVERLOAD SWITCH WITH PILOT LIGHT	+4'-0"	2.
	MAGNETIC STARTER	+5'-0"	7.
	MAGNETIC STARTER / DISCONNECT COMBINATION	+5'-0"	
VFD	VARIABLE FREQUENCY DRIVE	+6'-6"	
	PANEL BOARD	TOP AT +6'-0"	
	MAIN DISTRIBUTION PANEL		
	TELEPHONE TERMINAL BOARD		
	BELL	+7'-6"	
	CHIME	+7'-6"	
F	FIRE ALARM MANUAL STATION	+4'-0"	2.
H	FIRE ALARM SIGNAL HORN/STROBE	+6'-8"	6.
S	FIRE ALARM STROBE	+6'-8"	6.
S	SMOKE DETECTOR	CEILING	
D	DUCT SMOKE DETECTOR		MTD. IN DUCT
D	FIRE/SMOKE DAMPER		
	DOOR HOLDER	AS NOTED	
FS	FLOW SWITCH		
TS	TAMPER SWITCH		
WF	WATER FLOOD INDICATOR		
	O.S. & Y. VALVE		SEE DIAGRAM
R	FIRE ALARM RELAY		
CM	FIRE ALARM CONTROL MODULE		
MM	FIRE ALARM MONITOR MODULE		
	CLOSED CIRCUIT TELEVISION CAMERA	AS NOTED	
IC	INTERCOM SPEAKER	AS NOTED	
V	VOLUME CONTROL	+4'-0"	2.
M	MICROPHONE OUTLET	+16"	11.
A	AUDIO CONTROL PANEL	+5'-0"	2.
	SOUND EQUIPMENT CABINET		CIRCUIT TO 120V
842	ARCHITECTURAL ROOM NUMBER		
A	LIGHT FIXTURE (LETTER DESIGNATES TYPE)		
EQ 34	EQUIPMENT NUMBER		

SHEET INDEX

SENSOR GENERAL NOTES

1. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE SENSOR MANUFACTURER FOR PROPER PLACEMENT AND ADJUSTMENT OF OCCUPANCY SENSORS.
2. EACH ZONE SHALL HAVE COVERAGE BY OCCUPANCY SENSOR SUCH THAT NO BLIND SPOT EXIST.
3. UPON COMPLETION OF THE INSTALLATION, THE SYSTEM SHALL BE COMPLETELY COMMISSIONED BY THE MANUFACTURER'S FACTORY AUTHORIZED TECHNICIAN WHO WILL VERIFY ALL ADJUSTMENTS AND SENSOR PLACEMENT TO ENSURE A TROUBLE FREE INSTALLATION.
4. THE LOCATION AND QUANTITIES OF SENSORS SHOWN ON THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE ONLY THE ROOMS WHICH ARE TO BE PROVIDED WITH SENSORS. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ADDITIONAL SENSORS IF REQUIRED TO PROPERLY COVER THE RESPECTIVE ROOM.

GENERAL NOTES

1. CONSULT ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF ALL LIGHTING FIXTURES.
2. VERIFY ALL EQUIPMENT DIMENSIONS AND LOCATIONS BEFORE BEGINNING ROUGH IN. CONSULT ALL APPLICABLE CONTRACT DRAWINGS AND SHOP DRAWINGS TO INSURE NEC CODE CLEARANCES REQUIRED AROUND ALL ELECTRICAL EQUIPMENT.
3. CONTRACTOR SHALL VERIFY ALL ELECTRICAL LOADS (VOLTAGE, PHASE, CONNECTION REQUIREMENTS, ETC.) OF EQUIPMENT FURNISHED UNDER DIVISION 15 WITH APPROVED MECHANICAL SHOP DRAWINGS BEFORE BEGINNING ROUGH IN.
4. SEE SECTION 265100 OF THE SPECIFICATION REQUIRED COORDINATION MEETINGS WITH MECHANICAL AND CEILING CONTRACTORS.
5. SEE APPLICABLE SHOP DRAWINGS FOR ROUGH IN LOCATION OF ALL EQUIPMENT, WIRING DEVICES, ETC. WHERE APPLICABLE MOUNT ALL WIRING DEVICES ABOVE BACK SPLASH EXCEPT THOSE SERVING UNDER COUNTER EQUIPMENT.
6. SEE SPECIFICATION FOR ENERGY SAVING LAMP AND BALLAST REQUIREMENTS.
7. FINISHES OF ALL LIGHT FIXTURES SHALL BE AS SELECTED BY ARCHITECT.
8. THE ELECTRICAL CONTRACTOR SHALL NOTIFY AND COOPERATE WITH THE MECHANICAL CONTRACTOR SUCH THAT NO PIPING, DUCTS, OR EQUIPMENT FOREIGN TO THE OPERATION OF THE ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE INSTALLED IN, ENTER OR PASS THRU ELECTRICAL ROOMS OR SPACES, OR ABOVE OR BELOW ELECTRICAL EQUIPMENT IN OTHER AREAS.
9. ELECTRICAL BOXES SHALL NOT BE LOCATED IN MASONRY COLUMNS IN BRICK WALLS OR IN GROUTED CELLS ADJACENT TO OPENINGS. COORDINATE LOCATION OF BOXES WITH MASONRY CONTRACTOR.
10. ALL PENETRATIONS OF FIRE RATED FLOORS, WALLS, AND CEILINGS SHALL BE SEALED WITH APPROVED MATERIAL TO MAINTAIN FIRE RATING OF SURFACE PENETRATED.
11. CIRCUITS EXTENDING OVER 70' FOR 120 VOLT AND 165' FOR 277 VOLT 20 AMP CIRCUITS SHALL BE RUN WITH MINIMUM #10 CONDUCTORS.
12. REMOVE ALL DEVICES, BOXES AND CONDUIT IN WALLS THAT REMAIN.

SHEET KEYNOTES

1 PROVIDE INTERIOR DIGITAL PHOTOCELL TO PROVIDE DAYLIGHT DIMMING CONTROL FOR LIGHTING IN ROOM THRU RELAY PANEL.

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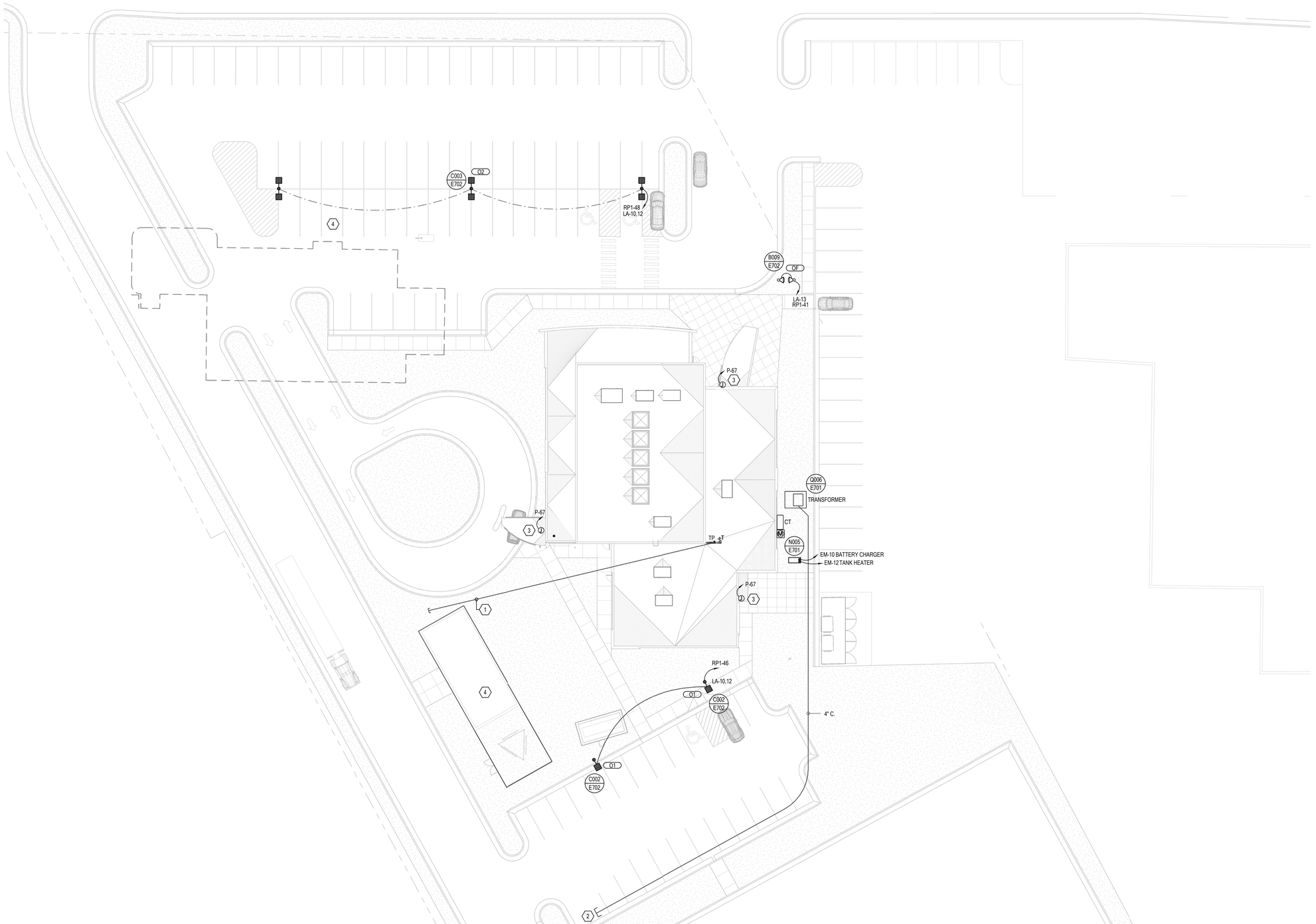
DATE/REVISION 11-24-2010
PROJECT #. 10019

SYMBOLS, SCHEDULES AND NOTES

E001



ELECTRICAL SITE PLAN

SCALE = 1" = 20'-0"

SHEET KEYNOTES

1. PROVIDE (4) 4" CONDUITS FROM NORTHEAST CORNER OF NEW COMMUNICATIONS ROOM TO EXISTING RADIO TOWER BUILDING.
2. PROVIDE 4" CONDUIT TO EXISTING SECTIONALIZER AT SOUTHEAST CORNER OF EXISTING BUILDING, PER ROCKY MOUNTAIN POWER REQUIREMENTS.
3. PROVIDE A 2' STAR PATTERN OF HEAT TAPE ON ROOF OF CANOPY AND A LOOP OF HEAT TAPE DOWN THE DOWN SPOUT.
4. LOCATE AND PRETECT EXISTING POWER AND TELEPHONE UTILITIES TO RADIO BUILDING WHICH REMAINS IN SERVICE AND EXISTING DRIVERS LICENSE BUILDING WHICH REMAINS IN SERVICE UNTIL NEW BUILDING IS COMPLETE.

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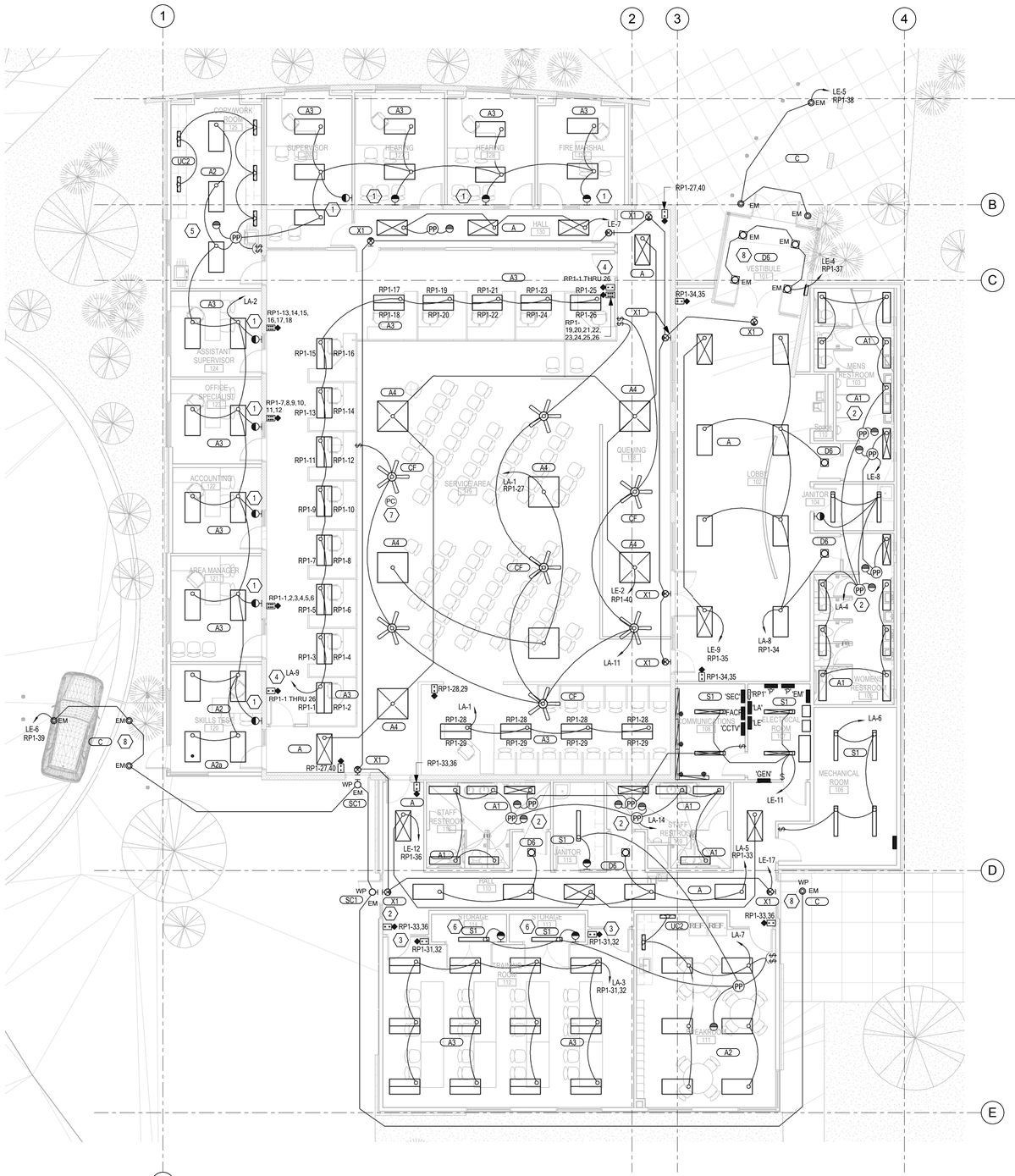
ELECTRICAL SITE PLAN

E101



GENERAL SHEET NOTES

1. CIRCUIT EXITS TO CLOSEST EM CIRCUIT WITH UN-SWITCHED NOT-LEG.

SHEET KEYNOTES

1. DUAL TECHNOLOGY WALL SWITCH WITH TWO BUTTONS TO CONTROL 2 LEVELS OF LIGHTING. FIRST CIRCUIT IS AUTO ON/OFF. SECOND CIRCUIT IS MANUAL ON/AUTO OFF.
2. DUAL TECHNOLOGY CEILING SENSOR WITH INTEGRAL POWER PACK, CONTROLS, EMERGENCY AND NORMAL CIRCUITS, AUTO ON/OFF OFF.
3. TWO BUTTON LOW VOLTAGE SWITCH. EACH BUTTON TOGGLES ON/OFF A SEPARATE RELAY.
4. TWO BUTTON LOW VOLTAGE SWITCH. TOP BUTTON TOGGLES ON LOWEST LEVEL OF LIGHTING LABEL BUTTON ALL ON. BOTTOM BUTTON TURNS OFF ALL LOADS, LABEL ALL OFF.
5. DUAL TECHNOLOGY CEILING SENSOR, CONTROLS TWO SEPARATE LOADS. OVERHEAD LIGHTS ARE AUTO ON/AUTO OFF. UNDERCOUNTER LIGHTS ARE MANUAL ON/AUTO OFF.
6. MOUNT FIXTURE ON WALL ABOVE DOOR, CONTROL WITH WALL MOUNT SENSOR, AUTO ON/AUTO OFF.
7. PHOTO-CELL TO CONTROL A4 FIXTURES. SET POINT IS 30 FOOT CANDLES.
8. RUN CONDUIT ABOVE ROOF DECK IN FLUTES.

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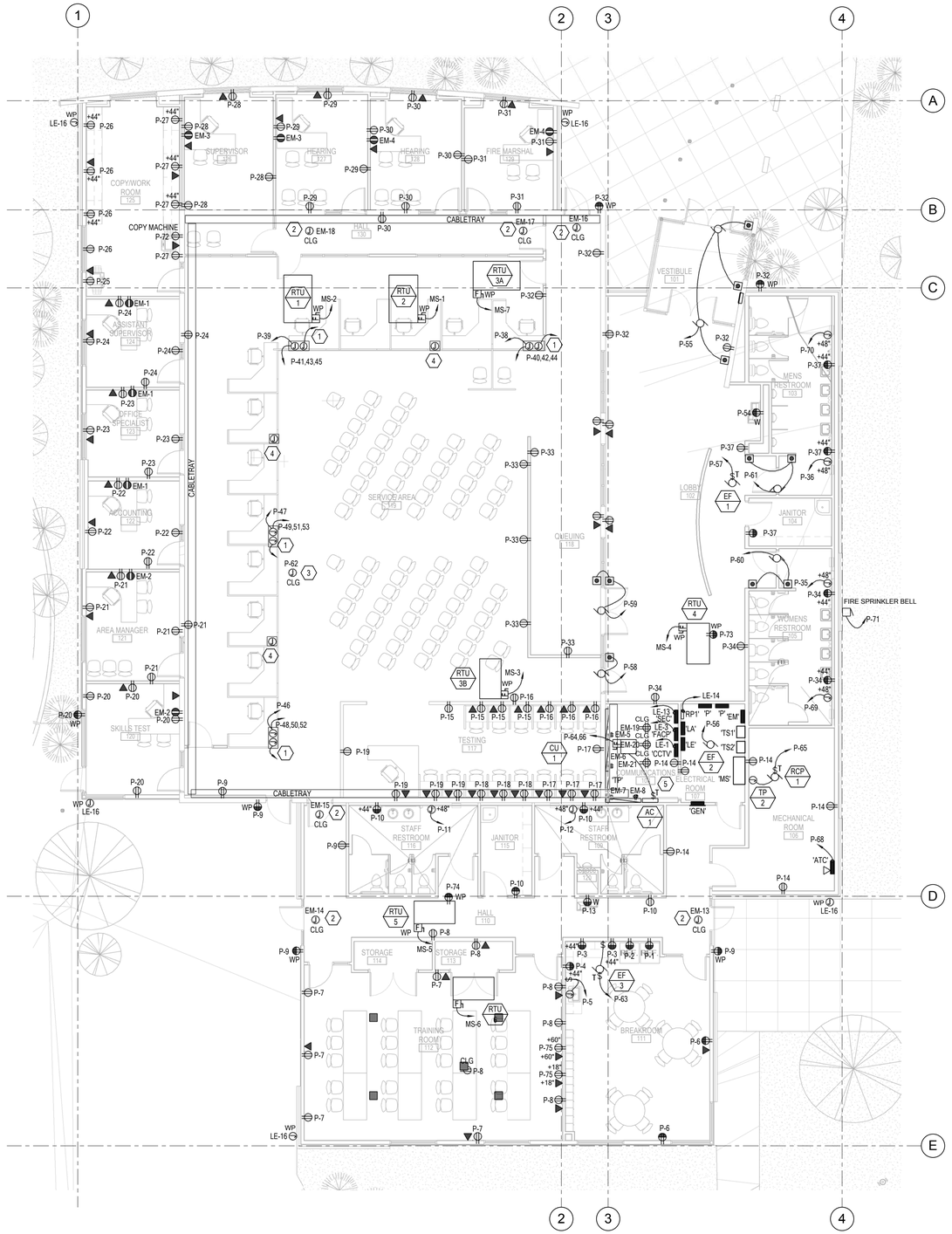
MAIN FLOOR LIGHTNG PLAN

E202



MAIN FLOOR POWER PLAN
SCALE = 1/8" = 1'-0"

SHEET KEYNOTES

1. PROVIDE (2) 1" CONDUIT TO CABLE TRAY FOR FUTURE TELEPHONE AND DATA CABLES. PROVIDE PULL ROPE.
2. PROVIDE CONNECTION TO DOOR CONTROL POWER SUPPLY TYPICAL.
3. PROVIDE CONNECTION TO OWNER FURNISHED AUTOMATED NUMBER SYSTEM DISPLAY.
4. PROVIDE FLUSH FLOOR BOX WITH (2) 1" CONDUITS TO LAY-IN CEILING FOR FUTURE AUTOMATED NUMBERING SYSTEM CABLES. PROVIDE PULL ROPE.
5. COORDINATE EXACT LOCATION OF OUTLETS ABOVE DATA RACKS WITH STATE DTS INSTALLER PRIOR TO INSTALLATION.

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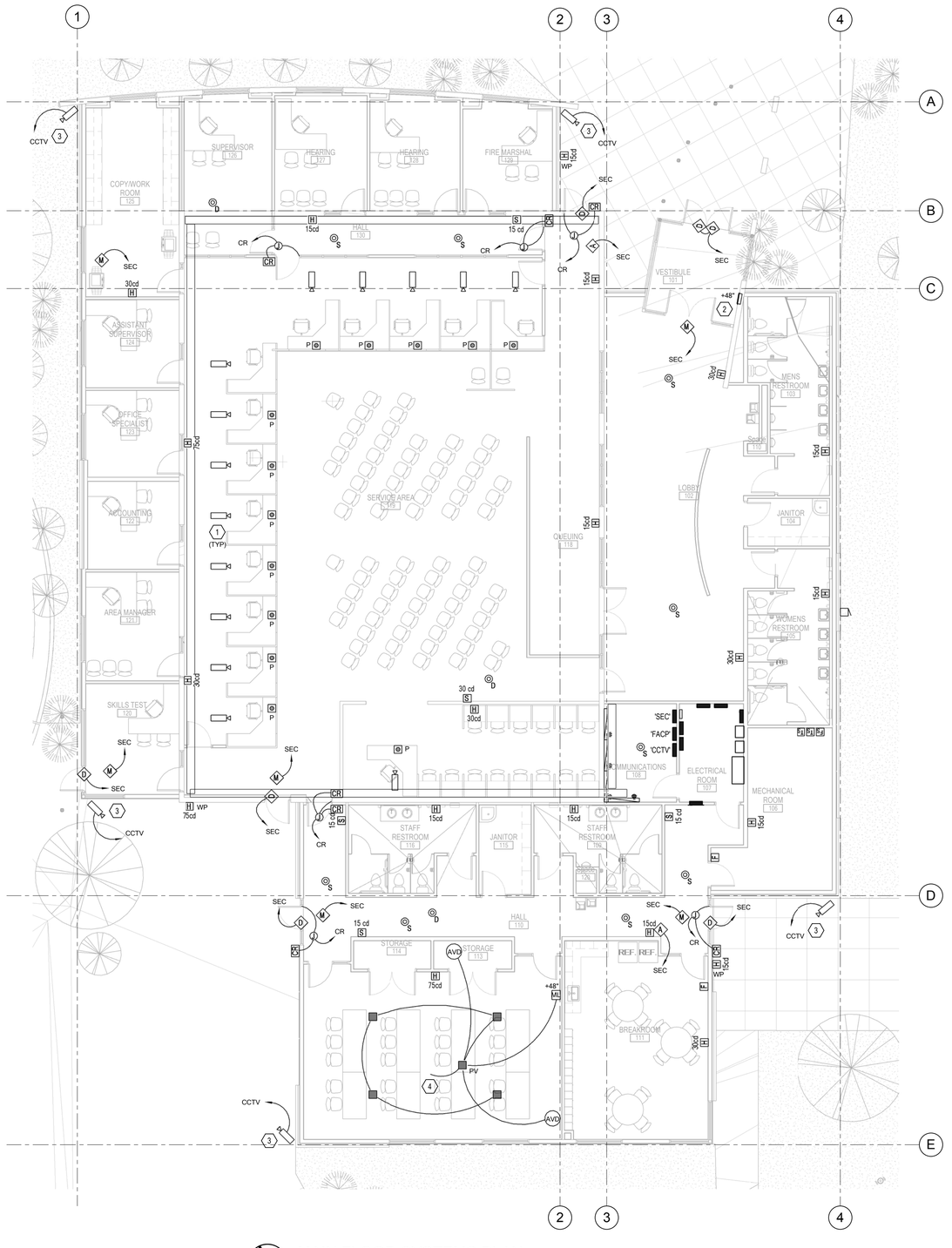
MAIN FLOOR POWER PLAN

E302



MAIN FLOOR SYSTEMS PLAN
SCALE = 1/8" = 1'-0"

SHEET KEYNOTES

1. FUTURE CCTV CAMERA BY THE OWNER (FOR REFERENCE ONLY).
2. FIRE ALARM REMOTE OPERATING PANEL (ANNUNCIATOR).
3. LOCATE A JUNCTION BOX ON BACK SIDE OF PARAPET FOR FUTURE CCTV CAMERA. PROVIDE A 3/4" CONDUIT TO THE CCTV JUNCTION BOX IN THE COMMUNICATIONS ROOM. PROVIDE PULL STRING. COORDINATE EXACT LOCATION WITH THE ARCHITECT.
4. SEE SPECIFICATIONS SECTION 274116 FOR AUDIO VISUAL PRESENTATION SYSTEM.

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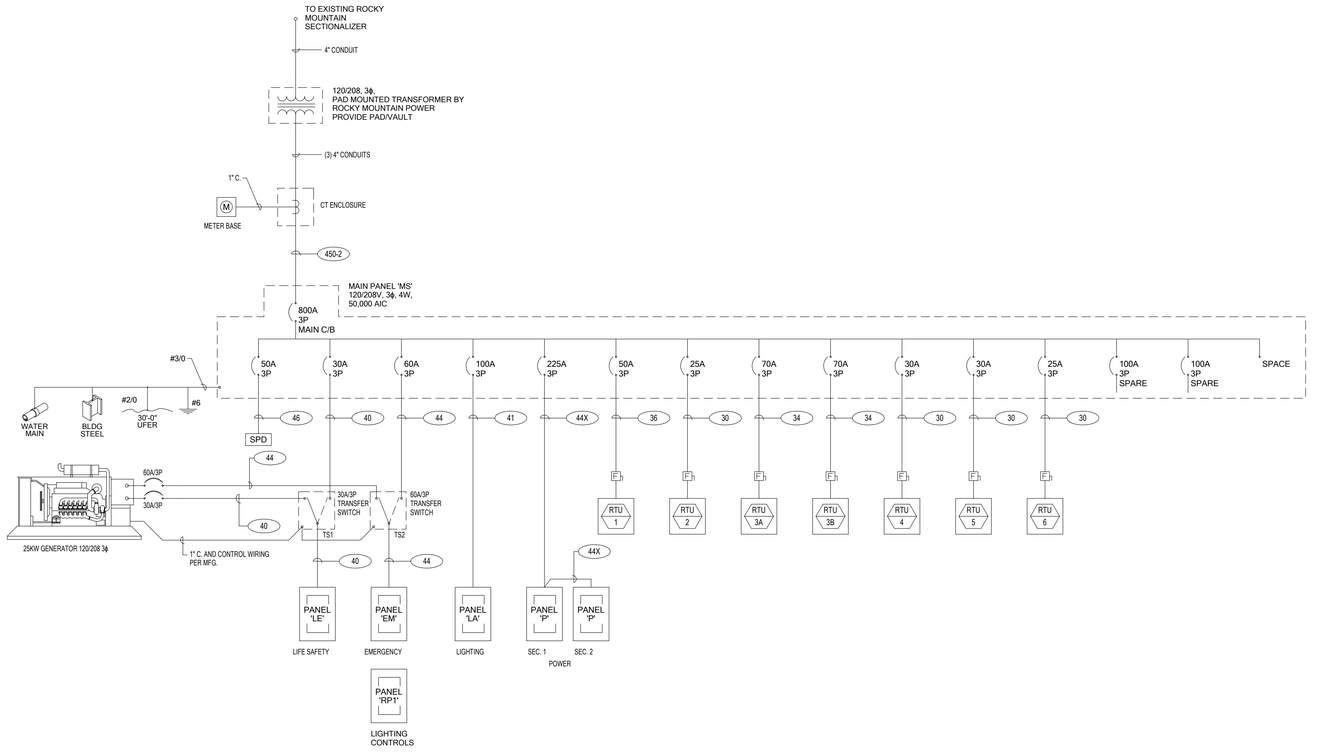
MAIN FLOOR SYSTEMS PLAN

E402



1 ONE-LINE DIAGRAM

NO SCALE

COPPER CONDUCTOR & O.C. PROT. FOR TRANSFORMER PRIMARY				COPPER CONDUCTOR & O.C. PROT. FOR TRANSFORMER SECONDARY △ 480/208/120 Y							
TRANS KVA	O.C. PROT.	TYPE COND.*	GND. COND.	O.C. PROT.	TYPE COND.	COND. AMPS	SETS	CONDUCTOR QUAN.	CONDUCTOR SIZE	CONDUIT SIZE	EQ. GND. COND.
30	50	38	8	100	T42-1	104	1	4	2	1-1/4"	8
45	70	34	4	175	T43X-1	180	1	4	3/0	2"	6
75	125	31	2	225	T425-1	232	1	4	250	2-1/2"	4
112.5	175	32X	1/0	400	T44X-2	416	2	4	4/0	2-1/2"	3
150	300	335	2/0	600	T440-2	608	2	4	400	3"	1
225	400	350	2/0	800	T435-3	840	3	4	350	3"	1/0
300	600	325-2	3/0	1200	T440-4	1216	4	4	400	3"	3/0
500	800	350-2	3/0	1600	T450-5	1720	5	4	500	4"	4/0
750	1500	335-5	3/0	3000	T450-9	3096	9	4	500	4"	400

COPPER CONDUCTOR & O.C. PROT. FOR TRANSFORMER PRIMARY				COPPER CONDUCTOR & O.C. PROT. FOR TRANSFORMER SECONDARY (200% NEUTRAL) △-480/208/120 Y							
TRANS KVA	O.C. PROT.	TYPE COND.*	GND. COND.	O.C. PROT.	TYPE COND.	COND. AMPS	SETS	CONDUCTOR QUAN.	CONDUCTOR SIZE	CONDUIT SIZE	EQ. GND. COND.
30	50	38	8	100	T52-1	104	1	5	2	1-1/2"	8
45	70	34	4	175	T53X-1	180	1	5	3/0	2-1/2"	6
75	125	31	2	225	T525-1	232	1	5	250	3"	4
112.5	175	32X	1/0	400	T54X-2	416	2	5	4/0	2-1/2"	3
150	300	335	2/0	600	T540-2	608	2	5	400	3-1/2"	1
225	400	350	2/0	800	T535-3	840	3	5	350	3"	1/0
300	600	325-2	3/0	1200	T540-4	1216	4	5	400	3"	3/0
500	800	350-2	3/0	1600	T550-5	1720	5	5	500	4"	4/0
750	1500	335-5	3/0	3000	T550-9	3096	9	5	500	4"	400

* SEE SCHEDULE FOR CONDUIT AND WIRE SIZE

COPPER CONDUCTOR & CONDUIT SCHEDULE

TYPE	AMP.	COND. SIZE	CONDUCTOR QUAN.	CONDUCTOR SIZE	INSUL-ATION	EQ. GND. COND.
20	30	3/4"	2	10	THHN THWN	10
30	30	3/4"	3	10	THHN THWN	10
40	30	3/4"	4	10	THHN THWN	10
28	40	3/4"	2	8	THHN THWN	10
38	40	3/4"	3	8	THHN THWN	10
48	40	3/4"	4	8	THHN THWN	10
26	55	3/4"	2	6	THHN THWN	8
36	55	3/4"	3	6	THHN THWN	8
46	55	1"	4	6	THHN THWN	8
24	70	3/4"	2	4	THHN THWN	8
34	70	1"	3	4	THHN THWN	8
44	70	1-1/4"	4	4	THHN THWN	8
23	85	1"	2	3	THHN THWN	8
33	85	1"	3	3	THHN THWN	8
43	85	1-1/4"	4	3	THHN THWN	8
32	95	1-1/4"	3	2	THHN THWN	6
42	95	1-1/4"	4	2	THHN THWN	6
31	110	1-1/4"	3	1	THHN THWN	6
41	110	1-1/2"	4	1	THHN THWN	6
51	110	2"	5	1	THHN THWN	6
31X	150	1-1/2"	3	1/0	THHN THWN	6
41X	150	1-1/2"	4	1/0	THHN THWN	6
51X	150	2"	5	1/0	THHN THWN	6
32X	175	1-1/2"	3	2/0	THHN THWN	6
42X	175	2"	4	2/0	THHN THWN	6
52X	175	2"	5 *	2/0	THHN THWN	6
33X	200	2"	3	3/0	THHN THWN	6
43X	200	2"	4	3/0	THHN THWN	6
53X	200	2-1/2"	5	3/0	THHN THWN	6
34X	230	2"	3	4/0	THHN THWN	4
44X	230	2-1/2"	4	4/0	THHN THWN	4
54X	230	2-1/2"	5	4/0	THHN THWN	4
325	255	2"	3	250	THHN THWN	4
425	255	2-1/2"	4	250	THHN THWN	4
525	255	2-1/2"	5	250	THHN THWN	4
335	310	2-1/2"	3	350	THHN THWN	3
435	310	3"	4	350	THHN THWN	3
535	310	3"	5	350	THHN THWN	3
340	335	3"	3	400	THHN THWN	3
440	335	3"	4	400	THHN THWN	3
540	335	3"	5	400	THHN THWN	3
350	380	3-1/2"	3	500	XHHW	3
450	380	3-1/2"	4	500	XHHW	3
550	380	3-1/2"	5	500	XHHW	3

COPPER CONDUCTOR & CONDUIT SCHEDULE FOR PARALLEL RUNS

TYPE	MAX. O.C. PROT.	COND. AMPS	SETS	CONDUCTOR QUAN.	CONDUCTOR SIZE	CONDUIT SIZE	EQ. GND. COND.
325-2	600	510	2	3	250	2-1/2"	1
425-2	600	510	2	4	250	2-1/2"	1
525-2	600	510	2	5	250	2-1/2"	1
435-2	700	620	2	4	350	3"	1/0
440-2	700	670	2	4	400	3"	1/0
350-2	800	760	2	3	500	3"	1/0
450-2	800	760	2	4	500	4"	1/0
550-2	800	760	2	5	500	4"	1/0
460-2	800	840	2	4	600	4"	1/0
335-3	900	930	3	3	350	3"	2/0
435-3	900	930	3	4	350	3"	2/0
535-3	900	930	3	5 *	350	3"	2/0
340-3	1000	1005	3	3	400	3"	2/0
440-3	1000	1005	3	4	400	3"	2/0
540-3	1000	1005	3	5	400	3"	2/0
435-4	1200	1240	4	4	350	3"	3/0
535-4	1200	1240	4	5	350	3"	3/0
460-3	1200	1260	3	4	600	4"	3/0
335-5	1500	1550	5	3	350	3"	4/0
440-5	1600	1675	5	4	400	3"	4/0
540-5	1600	1675	5	5	400	3"	4/0
460-4	1600	1680	4	4	600	4"	4/0
440-6	2000	2010	6	4	400	3"	250
460-6	2500	2520	6	4	600	4"	350
450-8	3000	3040	8	4	500	4"	400
450-11	4000	4180	11	4	500	4"	500

NOTES
IN PARALLEL RUNS SIZE GND. COND. IN ACCORDANCE WITH NEC PARA. 250-122.

GND. CONDUCTOR MAY BE DELETED ON SERVICE ENTRANCE CONDUCTORS

* 200% NEUTRAL

DLD OGDEN

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DATE/REVISION	PROJECT #.
11-24-2010	10019

ONE LINE DIAGRAM

E501

PANELBOARD SCHEDULE

PANEL: LE **TYPE:** Type 1 **VOLTS:** 120/208 Wye **PHASE:** 3 **WIRES:** 4

MOUNTING: SURFACE **LOCATION:** ELECTRICAL **MAINS:** LUGS

AMP: 100 A

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
Power COMMUNICATIONS 108	20 A	1	1-#12,	1	200 VA			1100 VA			2	1-#6,	1	20 A	Lighting QUEUING 118
Power COMMUNICATIONS 108	20 A	1	1-#12,	3		200 VA			600 VA		4	1-#12,	1	20 A	Lighting VESTIBULE 101
Lighting	20 A	1	1-#12,	5			180 VA			244 VA	6	1-#12,	1	20 A	Lighting
Lighting HALL 130	20 A	1	1-#12,	7	211 VA			116 VA			8	1-#12,	1	20 A	Lighting MENS RESTROOM 103
Lighting LOBBY 102	20 A	1	1-#12,	9		140 VA					10				
Lighting ELECTRICAL ROOM	20 A	1	1-#12,	11			344 VA			210 VA	12	1-#12,	1	20 A	Lighting HALL 110
Power COMMUNICATIONS 108	20 A	1	1-#12,	13	200 VA			200 VA			14	1-#12,	1	20 A	Power ELECTRICAL ROOM 107
				15					1000 VA		16	1-#4,	1	20 A	Power
Lighting HALL 110	20 A	1	1-#12,	17			25 VA			0 VA	18	--	1	20 A	Spare
Spare	20 A	1	--	19	0 VA			0 VA			20	--	1	20 A	Spare
Spare	20 A	1	--	21		0 VA			0 VA		22	--	1	20 A	Spare
Spare	20 A	1	--	23			0 VA			0 VA	24	--	1	20 A	Spare
Spare	20 A	1	--	25	0 VA			0 VA			26	--	1	20 A	Spare
Space	--	--	--	27		0 VA			0 VA		28	--	--	--	Space
Space	--	--	--	29			0 VA			0 VA	30	--	--	--	Space
Space	--	--	--	31	0 VA			0 VA			32	--	--	--	Space
Space	--	--	--	33		0 VA			0 VA		34	--	--	--	Space
Space	--	--	--	35			0 VA			0 VA	36	--	--	--	Space
Space	--	--	--	37	0 VA			0 VA			38	--	--	--	Space
Space	--	--	--	39		0 VA			0 VA		40	--	--	--	Space
Space	--	--	--	41			0 VA			0 VA	42	--	--	--	Space
				TOTAL	2027	1940	1003								
				AMPS/PHASE	17 A	16 A	8 A								

Legend:

CONNECTED LOAD TOTAL 4970 VA

EQUIP RATING

AMPS RMS SYSM.

PANELBOARD SCHEDULE

PANEL: LA **TYPE:** Type 1 **VOLTS:** 120/208 Wye **PHASE:** 3 **WIRES:** 4

MOUNTING: FLUSH **LOCATION:** ELECTRICAL **MAINS:** LUGS

AMP: 100 A

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
Lighting SERVICE AREA 119	20 A	1	1-#8,	1	1008 VA			1806 VA			2	1-#1,	1	20 A	Lighting ASSISTANT SUPERVISOR
Lighting Space 122	20 A	1	1-#8,	3		864 VA			743 VA		4	1-#12,	1	20 A	Lighting MENS RESTROOM 103
Lighting HALL 110	20 A	1	1-#12,	5			580 VA			124 VA	6	1-#12,	1	20 A	Lighting MECHANICAL ROOM 106
Lighting BREAKROOM 111	20 A	1	1-#10,	7	590 VA			720 VA			8	1-#10,	1	20 A	Lighting LOBBY 102
Lighting SERVICE AREA 119	20 A	1	1-#8,	9		936 VA			1136 VA		10	2-#8,	2	20 A	Lighting
Lighting QUEUING 118	20 A	1	1-#3,	11			2555 VA			0 VA	12	--	--	--	--
Lighting Flag Pole	20 A	1	1-#12,	13	370 VA			401 VA			14	1-#12,	1	20 A	Lighting STAFF RESTROOM 109
Spare	20 A	1	--	15		0 VA			0 VA		16	--	1	20 A	Spare
Spare	20 A	1	--	17			0 VA			0 VA	18	--	1	20 A	Spare
Spare	20 A	1	--	19	0 VA			0 VA			20	--	1	20 A	Spare
Spare	20 A	1	--	21		0 VA			0 VA		22	--	1	20 A	Spare
Space	--	--	--	23			0 VA			0 VA	24	--	--	--	Space
Space	--	--	--	25	0 VA			0 VA			26	--	--	--	Space
Space	--	--	--	27		0 VA			0 VA		28	--	--	--	Space
Space	--	--	--	29			0 VA			0 VA	30	--	--	--	Space
Space	--	--	--	31	0 VA			0 VA			32	--	--	--	Space
Space	--	--	--	33		0 VA			0 VA		34	--	--	--	Space
Space	--	--	--	35			0 VA			0 VA	36	--	--	--	Space
Space	--	--	--	37	0 VA			0 VA			38	--	--	--	Space
Space	--	--	--	39		0 VA			0 VA		40	--	--	--	Space
Space	--	--	--	41			0 VA			0 VA	42	--	--	--	Space
				TOTAL	4895	3679	3259								
				AMPS/PHASE	41 A	31 A	27 A								

Legend:

CONNECTED LOAD TOTAL 11833 VA

EQUIP RATING

AMPS RMS SYSM.

PANELBOARD SCHEDULE

PANEL: EM **TYPE:** Type 1 **VOLTS:** 120/208 Wye **PHASE:** 3 **WIRES:** 4

MOUNTING: SURFACE **LOCATION:** ELECTRICAL **MAINS:** LUGS

AMP: 100 A

BRANCH BREAKERS

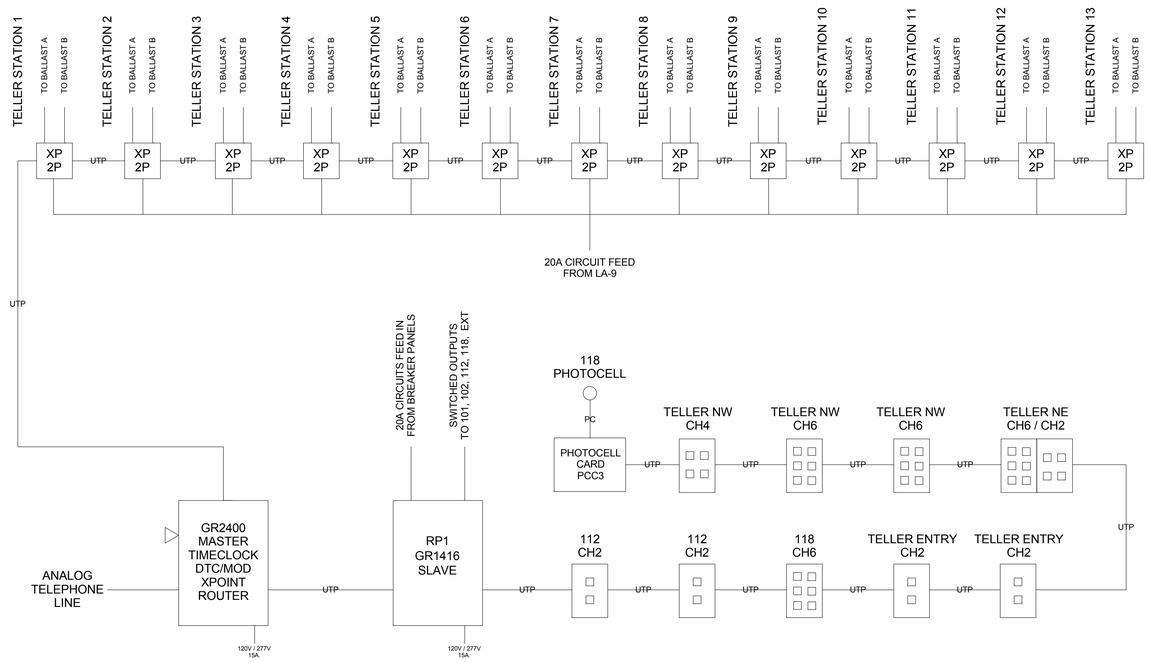
ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
Power ACCOUNTING 122	20 A	1	1-#10,	1	540 VA			360 VA			2	1-#12,	1	20 A	Power AREA MANAGER 121
Power SUPERVISOR 126	20 A	1	1-#12,	3		360 VA			360 VA		4	1-#12,	1	20 A	Power HEARING 128
TELEPHONE BOARD	20 A	1	1-#12,	5			500 VA			500 VA	6	1-#12,	1	20 A	TELEPHONE BOARD
TELEPHONE BOARD	20 A	1	1-#12,	7	500 VA			500 VA			8	1-#12,	1	20 A	TELEPHONE BOARD
Spare	0 A	1	--	9		0 VA			1500 VA		10	1-#12,	1	20 A	BATTERY CHARGER
Spare	0 A	1	--	11			0 VA			1500 VA	12	1-#12,	1	20 A	TANK HEATER
Power HALL 110	20 A	1	1-#12,	13	500 VA			500 VA			14	1-#12,	1	20 A	Power HALL 110
Power HALL 110	20 A	1	1-#12,	15		500 VA			500 VA		16	1-#12,	1	20 A	Power SERVICE AREA 119
Power HALL 130	20 A	1	1-#12,	17			500 VA			500 VA	18	1-#12,	1	20 A	Power HALL 130
Power COMMUNICATIONS 108	20 A	1	1-#12,	19	360 VA			360 VA			20	1-#12,	1	20 A	Power COMMUNICATIONS 108
Power COMMUNICATIONS 108	20 A	1	1-#12,	21		360 VA			0 VA		22	--	1	20 A	Spare
Spare	20 A	1	--	23			0 VA			0 VA	24	--	1	20 A	Spare
Spare	20 A	1	--	25	0 VA			0 VA			26	--	1	20 A	Spare
Spare	20 A	1	--	27		0 VA			0 VA		28	--	1	20 A	Spare
Spare	20 A	1	--	29			0 VA			0 VA	30	--	--	--	Space
Space	--	--	--	31	0 VA			0 VA			32	--	--	--	Space
Space	--	--	--	33		0 VA			0 VA		34	--	--	--	Space
Space	--	--	--	35			0 VA			0 VA	36	--	--	--	Space
Space	--	--	--	37	0 VA			0 VA			38	--	--	--	Space
Space	--	--	--	39		0 VA			0 VA		40	--	--	--	Space
Space	--	--	--	41			0 VA			0 VA	42	--	--	--	Space
				TOTAL	3620	3580	3500								
				AMPS/PHASE	30 A	30 A	29 A								

Legend:

CONNECTED LOAD TOTAL 8700 VA

EQUIP RATING

AMPS RMS SYSM.



Notes:

XP2P – XPOINT BI-LEVEL SWITCHING MODULE
TIE XPOINT'S TO PHOTOCELL FOR DAYLIGHT HARVESTING, LOCAL SWITCHES PROVIDE DAYLIGHT OVERRIDE WITH 1 HR TIMED OFF

Wire Designations

UTP	(1) Belden 1583A (CAT5)
PC	(2) #18AWG stranded

1

SHEET KEYNOTES

1. SEE RELAY PANEL SCHEDULE FOR ADDITIONAL RELAYS AND CONTROLS.

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DATE/REVISION	PROJECT #.
11-24-2010	10019

PANELBOARD SCHEDULES

E502

RELAY PANEL SCHEDULE

	RELAY	CONTROL	ROOM NAME	RM No.	FIXTURE TYPE	QTY	PANEL	CIRCUIT	RELAY LOAD
	RP1-1	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-2	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-3	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-4	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-5	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-6	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-7	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-8	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-9	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-10	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-11	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-12	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-13	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-14	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-15	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-16	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-17	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-18	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-19	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-20	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-21	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-22	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-23	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-24	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-25	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-26	LV SW	SERVICE AREA	119	A3	1	LA	9	36 VA
	RP1-27	PC, LV SW	SERVICE AREA	119	A4	3	LA	1	720 VA
	RP1-28	LV SW	TESTING	117	A3	4	LA	1	144 VA
	RP1-29	LV SW	TESTING	117	A3	4	LA	1	144 VA
	RP1-31	LV SW	TRAINING ROOM	112	A3	12	LA	3	432 VA
	RP1-32	LV SW	TRAINING ROOM	112	A3	12	LA	3	432 VA
	RP1-33	LV SW	HALL	110	A	4	LA	5	280 VA
	RP1-33	LV SW	HALL	110	D6	2	LA	5	300 VA
	RP1-34	LV SW	LOBBY	102	A	6	LA	8	420 VA
	RP1-34	LV SW	LOBBY	102	D6	2	LA	8	300 VA
	RP1-35	LV SW	LOBBY	102	A	2	LE	9	140 VA
1	RP1-36	LV SW	HALL	110	A	3	LE	12	210 VA
1	RP1-37	TC	VESTIBULE	101	D6	4	LE	4	600 VA
1	RP1-38	PC/TC			C	3	LE	5	180 VA
1	RP1-39	PC/TC			C	3	LE	6	180 VA
1	RP1-40	LV SW	QUEUING	118	A4	1	LE	2	240 VA
	RP1-40	LV SW	SERVICE AREA	119	A	2	LE	2	140 VA
	RP1-40	LV SW	SERVICE AREA	119	A4	3	LE	2	720 VA
	RP1-41	PC			OF	1	LA	13	185 VA
	RP1-46	PC/TC			O1	2	LA	10,12	284 VA
	RP1-48	PC/TC			O2	6	LA	10,12	852 VA

PANELBOARD SCHEDULE

PANEL: P **TYPE:** Type 1 **VOLTS:** 120/208 Wye **PHASE:** 3 **WIRES:** 4

MOUNTING: SURFACE **LOCATION:** ELECTRICAL **MAINS:** LUGS

AMP: 225 A

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
BREAKROOM 111 REF	20 A	1	1-#12, 1-#12,	1	1000			1000			2	1-#12, 1-#12,	1	20 A	Power BREAKROOM 111
Power BREAKROOM 111	20 A	1	1-#12, 1-#12,	3		360 VA			180 VA		4	1-#12, 1-#12,	1	20 A	Power BREAKROOM 111
BREAKROOM 111 DISPOSAL	20 A	1	1-#12, 1-#12,	5			0 VA			360 VA	6	1-#12, 1-#12,	1	20 A	Power Room 112, 111
Power Room 112	20 A	1	1-#8, 1-#8,	7	1080			1260			8	1-#8, 1-#8,	1	20 A	Power TRAINING ROOM 112
Power	20 A	1	1-#10, 1-#10,	9		900 VA			720 VA		10	1-#10, 1-#10,	1	20 A	Power JANITOR 115
Power STAFF RESTROOM 116	25 A	1	1-#10, 1-#10,	11			2000			2000	12	1-#10, 1-#10,	1	25 A	Power STAFF RESTROOM 109
Power EWC	20 A	1	1-#12, 1-#12,	13	500 VA			1080			14	1-#10, 1-#10,	1	20 A	Power HALL 110
Power TESTING 117	20 A	1	1-#12, 1-#12,	15		1260			1260		16	1-#12, 1-#12,	1	20 A	Power SERVICE AREA 119
Power TESTING 117	20 A	1	1-#12, 1-#12,	17			1260			1080	18	1-#12, 1-#12,	1	20 A	Power TESTING 117
Power TESTING 117	20 A	1	1-#12, 1-#12,	19	1080			900 VA			20	1-#10, 1-#10,	1	20 A	Power SKILLS TEST 120
Power AREA MANAGER 121	20 A	1	1-#10, 1-#10,	21		900 VA			720 VA		22	1-#10, 1-#10,	1	20 A	Power ACCOUNTING 122
Power OFFICE SPECIALIST 123	20 A	1	1-#10, 1-#10,	23			720 VA			900 VA	24	1-#8, 1-#8,	1	20 A	Power ASSISTANT SUPERVISOR 124
Power COPY/WORK ROOM 125	20 A	1	1-#12, 1-#12,	25	180 VA			720 VA			26	1-#10, 1-#10,	1	20 A	Power COPY/WORK ROOM 125
Power COPY/WORK ROOM 125	20 A	1	1-#10, 1-#10,	27		720 VA			720 VA		28	1-#10, 1-#10,	1	20 A	Power SUPERVISOR 126
Power HEARING 127	20 A	1	1-#10, 1-#10,	29			720 VA			900 VA	30	1-#8, 1-#8,	1	20 A	Power HEARING 128
Power FIRE MARSHAL 129	20 A	1	1-#10, 1-#10,	31	720 VA			1080			32	1-#8, 1-#8,	1	20 A	Power SERVICE AREA 119
Power QUEUING 118	20 A	1	1-#12, 1-#12,	33		900 VA			720 VA		34	1-#12, 1-#12,	1	20 A	Power LOBBY 102
WOMENS RR 105 HAND DRYER	25 A	1	1-#10, 1-#10,	35			2000			2000	36	1-#10, 1-#10,	1	25 A	MENS RR 103 HAND DRYER
Power JANITOR 104	20 A	1	1-#12, 1-#12,	37	720 VA			0 VA			38	1-#12, 1-#12,	1	20 A	Power SERVICE AREA 119
Power SERVICE AREA 119	20 A	1	1-#12, 1-#12,	39		0 VA			0 VA		40	3-#12, 1-#12,	3	20 A	Power SERVICE AREA 119
Power SERVICE AREA 119	20 A	3	3-#12, 1-#12,	41			0 VA			0 VA	42	--	--	--	--
--	--	--	--	43	0 VA			0 VA			44	--	--	--	--
--	--	--	--	45		0 VA			0 VA		46	1-#12, 1-#12,	1	20 A	Power SERVICE AREA 119
Power SERVICE AREA 119	20 A	1	1-#12, 1-#12,	47			0 VA			0 VA	48	3-#12, 1-#12,	3	20 A	Power SERVICE AREA 119
Power SERVICE AREA 119	20 A	3	3-#12, 1-#12,	49	0 VA			0 VA			50	--	--	--	--
--	--	--	--	51		0 VA			0 VA		52	--	--	--	--
--	--	--	--	53			0 VA			500 VA	54	1-#12, 1-#12,	1	20 A	LOBBY 102 EWC
Other VESTIBULE 101	20 A	1	1-#10, 1-#10,	55	940 VA			130 VA			56	1-#12, 1-#12,	1	20 A	Other HALL 110
Other LOBBY 102	20 A	1	1-#12, 1-#12,	57		0 VA			380 VA		58	1-#12, 1-#12,	1	20 A	Other LOBBY 102
Other LOBBY 102	20 A	1	1-#12, 1-#12,	59			380 VA			560 VA	60	1-#12, 1-#12,	1	20 A	Other
Other	20 A	1	1-#12, 1-#12,	61	560 VA			200 VA			62	1-#12, 1-#12,	1	20 A	Power SERVICE AREA 119
Other BREAKROOM 111	20 A	1	1-#12, 1-#12,	63		0 VA			8716		64	2-#12, 1-#12,	2	20 A	HVAC COMMUNICATIONS 108
Other MECHANICAL ROOM 106	20 A	1	1-#12, 1-#12,	65			265 VA			8716	66	--	--	--	--
Power	20 A	1	1-#8, 1-#8,	67	600 VA			200 VA			68	1-#12, 1-#12,	1	20 A	Power MECHANICAL ROOM 106
Power WOMENS RESTROOM 105	20 A	1	1-#12, 1-#12,	69		2000			2000		70	1-#8, 1-#8,	1	20 A	Power MENS RESTROOM 103
FIRE SPRINKLER BELL	20 A	1	1-#12, 1-#12,	71			65 VA			180 VA	72	1-#12, 1-#12,	1	20 A	Power Copy Machine ROOM 125
Power LOBBY 102	20 A	1	1-#12, 1-#12,	73	180 VA			180 VA			74	1-#12, 1-#12,	1	20 A	Power HALL 110
Power TRAINING ROOM 112	20 A	1	1-#12, 1-#12,	75		360 VA			0 VA		76	--	1	20 A	Spare
Spare	20 A	1	--	77			0 VA			0 VA	78	--	1	20 A	Spare
Spare	20 A	1	--	79	0 VA			0 VA			80	--	1	20 A	Spare
Spare	20 A	1	--	81		0 VA			0 VA		82	--	1	20 A	Spare
Spare	20 A	1	--	83			0 VA			0 VA	84	--	1	20 A	Spare
TOTAL					14310	22816	24606								
AMPS/PHASE					119 A	190 A	205 A								

Legend:

THIS IS A 2 SECTION PANEL

EQUIP RATING 10,000 **AMPS RMS SYSM.**

CONNECTED LOAD TOTAL 61732 VA

SHEET KEYNOTES

1. RELAYS SHALL FAIL CLOSED (TURN LIGHTS ON) UPON LOSS OF POWER.

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DATE/REVISION	PROJECT #.
11-24-2010	10019

PANELBOARD SCHEDULES

E503

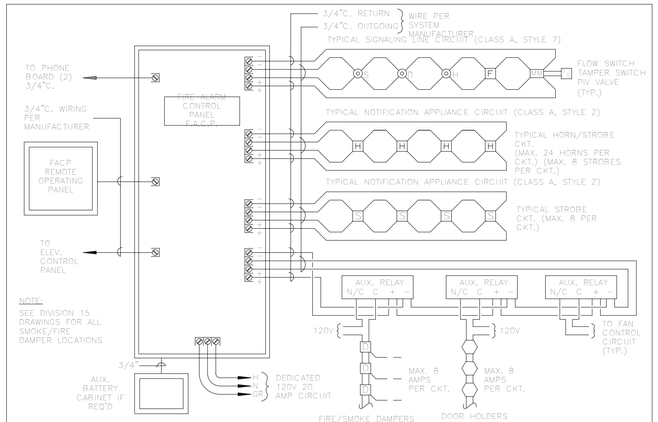

DIAGRAM D002 TYPICAL FIRE ALARM RISER

NTS

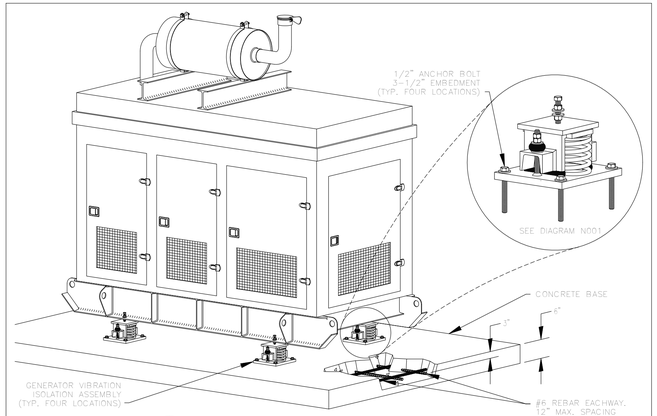

DIAGRAM N005 GENERATOR WITH VIBRATION ISOLATOR

NTS

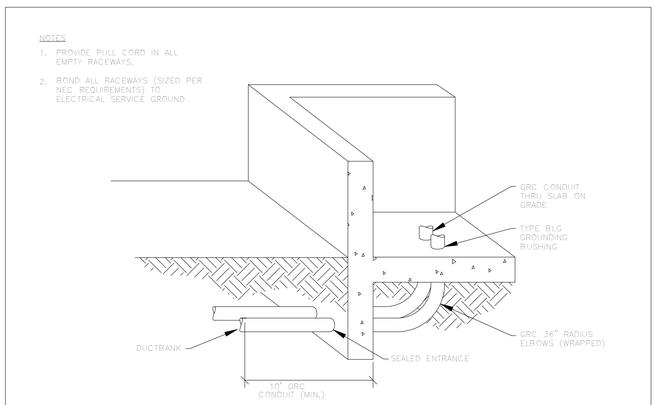

DIAGRAM F002 BUILDING ENTRANCE CONDUITS

NTS

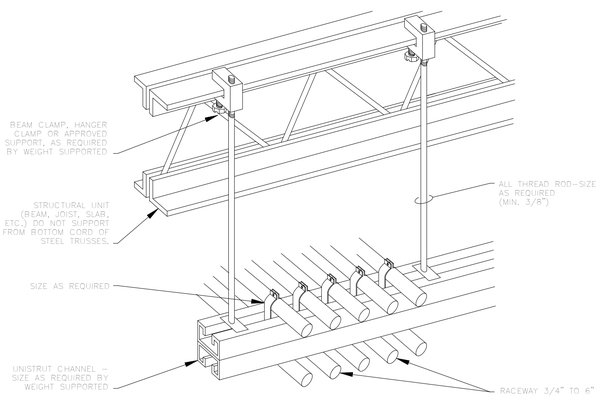

DIAGRAM H001 TYPICAL TRAPEZE CONDUIT RACK

NTS

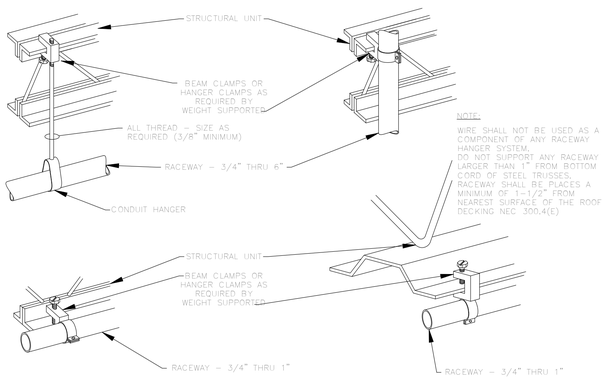

DIAGRAM H003 TYPICAL RACEWAY SUPPORT METHODS

NTS

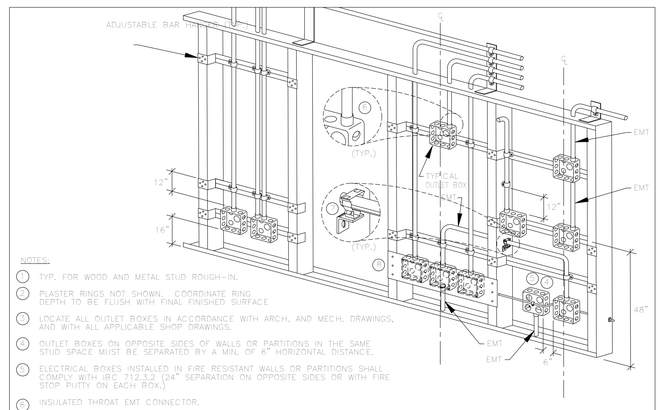

DIAGRAM H004 TYPICAL ROUGH IN REQUIREMENTS

NTS

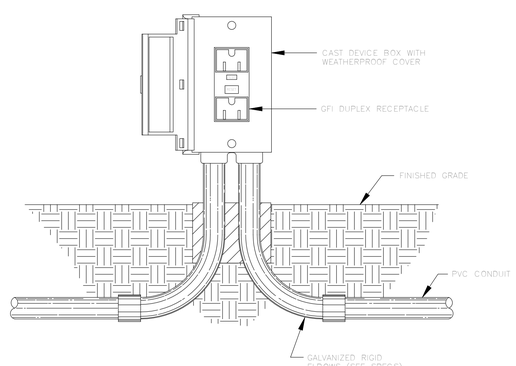

DIAGRAM L002 RECEPTACLE MOUNTING

NTS

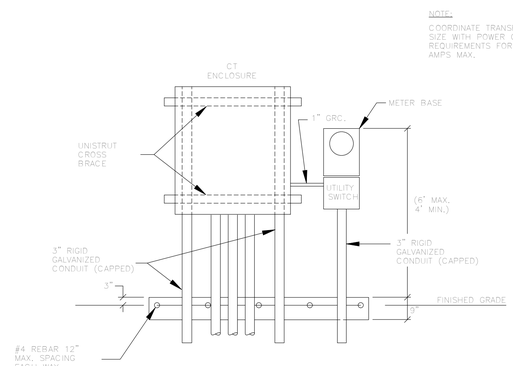

DIAGRAM Q001 CURRENT TRANSFORMER METERING

NTS

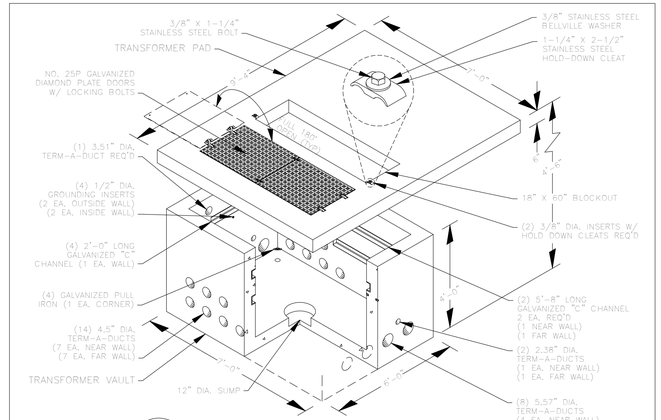

DIAGRAM Q006 TRANSFORMER VAULT

NTS

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DATE/REVISION	PROJECT #.
11-24-2010	10019

ELECTRICAL DIAGRAMS

E701

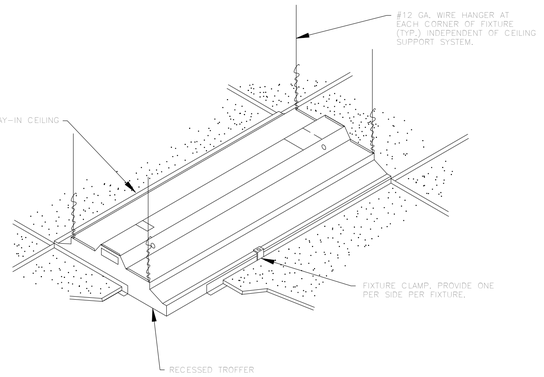


DIAGRAM A001 TYP. RECESSED FIXTURE MOUNTING
NTS

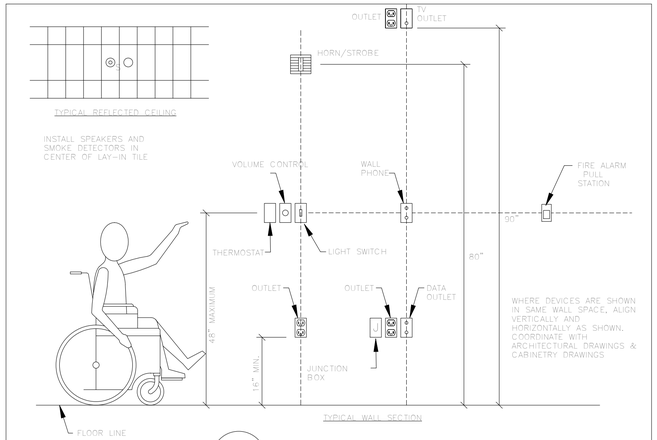


DIAGRAM R001 DEVICE MOUNTING HEIGHTS
NTS

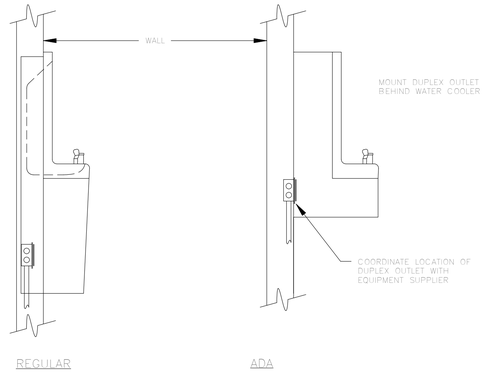


DIAGRAM R002 ELECTRIC WATER COOLER (EWC)
NTS

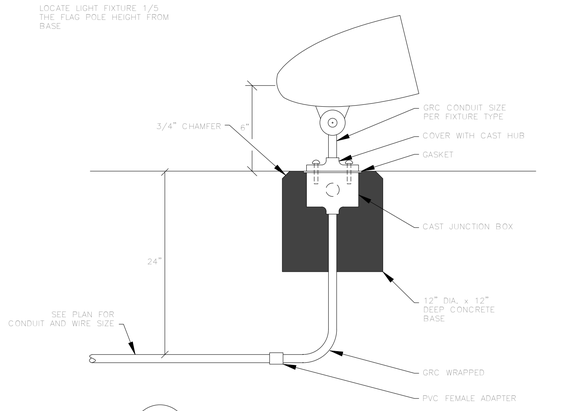


DIAGRAM B009 FLAGPOLE LIGHTING
NTS

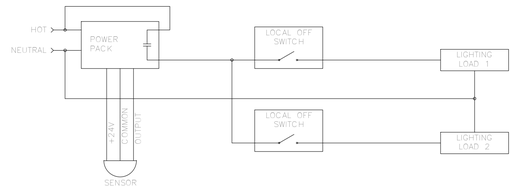


DIAGRAM S007 SENSOR CONTROLLING DUAL LEVEL LIGHTING
NTS

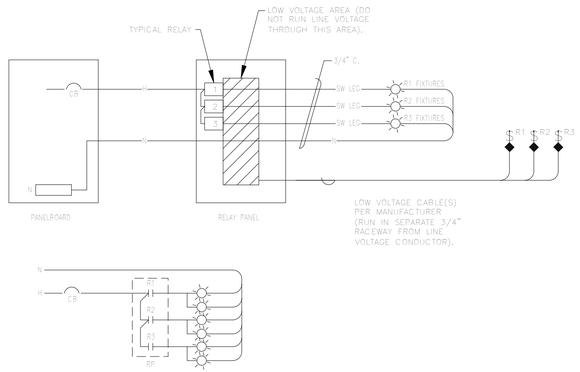
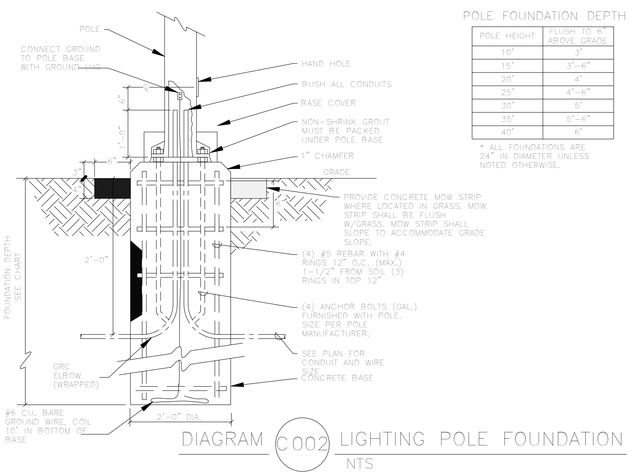


DIAGRAM S021 MULTIPLE RELAYS FED FROM ONE CIRCUIT
NTS

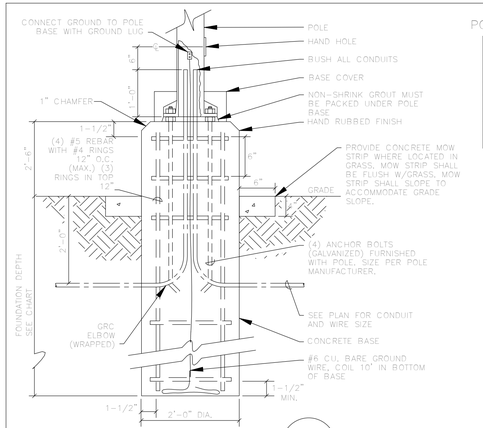


POLE FOUNDATION DEPTH

POLE HEIGHT	FLUSH TO 6" ABOVE GRADE
10'	3'
15'	3'-6"
20'	4'
25'	4'-6"
30'	5'
35'	5'-6"
40'	6'

* ALL FOUNDATIONS ARE 24" IN DIAMETER UNLESS NOTED OTHERWISE.

DIAGRAM C002 LIGHTING POLE FOUNDATION
NTS



POLE FOUNDATION DEPTH

POLE HEIGHT	2'-6" ABOVE GRADE
10'	4'
15'	4'-6"
20'	5'
25'	5'-6"
30'	6'
35'	6'-6"
40'	7'

* ALL FOUNDATIONS ARE 24" IN DIAMETER UNLESS NOTED OTHERWISE.

DIAGRAM C003 LIGHTING POLE FOUNDATION
NTS

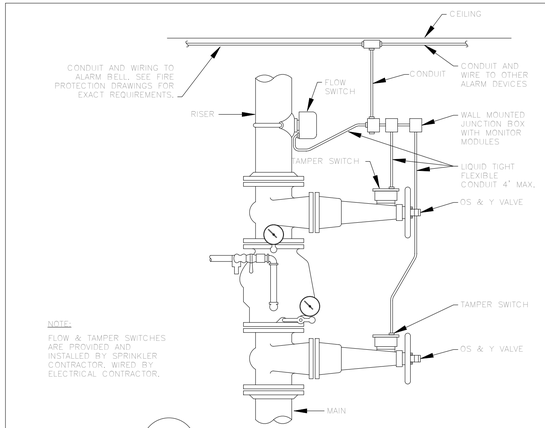


DIAGRAM D001 FIRE SPRINKLER RISER CONNECTION
NTS

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ELECTRICAL DIAGRAMS

E702